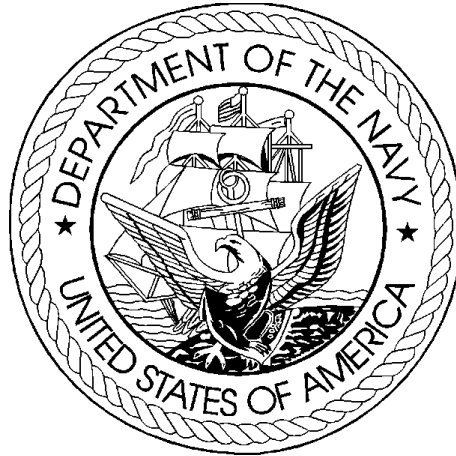


DEPARTMENT OF THE NAVY
FISCAL YEAR (FY) 2003
BUDGET ESTIMATES



JUSTIFICATION OF ESTIMATES
FEBRUARY 2002

RESEARCH, DEVELOPMENT, TEST &
EVALUATION, NAVY
BUDGET ACTIVITY 6

UNCLASSIFIED

Department of the Navy
FY 2000 RDT&E Program

Exhibit R-1

APPROPRIATION: 1319n Research, Development, Test and Evaluation, Navy

DATE: February 2002

R-1 Line Number	Program Element Number	Item Nomenclature	Thousands of Dollars				Security Classification
			Budget Activity	FY 2001	FY 2002	FY 2003	
150	0604256N	Threat Simulator Development	6	23.215	29.844	30.599	U
151	0604258N	Target Systems Development	6	31.465	49.073	45.562	U
152	0604759N	MAJOR T&E INVESTMENT	6	43.838	44.111	42.453	U
153	0605152N	STUDIES AND ANALYSIS SUPPORT - NAVY	6	8.269	5.926	4.071	U
154	0605154N	CENTER FOR NAVAL ANALYSES	6	43.303	42.691	45.435	U
155	0605155N	Fleet Tactical Development	6	2.675	2.886	2.771	U
156	0605502N	SMALL BUSINESS INNOVATIVE RESEARCH	6	146.160	0.000	0.000	U
157	0605804N	TECHNICAL INFORMATION SERVICES	6	11.524	10.161	0.929	U
158	0605853N	MANAGEMENT, TECHNICAL & INTERNATIONAL SUPPC	6	18.579	27.413	50.787	U
159	0605856N	STRATEGIC TECHNICAL SUPPORT	6	2.304	2.369	2.340	U
160	0605861N	RDT&E SCIENCE AND TECHNOLOGY MANAGEMENT	6	55.256	54.340	59.447	U
161	0605862N	RDT&E INSTRUMENTATION MODERNIZATION	6	14.352	13.382	13.289	U
162	0605863N	RDT&E SHIP AND AIRCRAFT SUPPORT	6	75.754	71.101	71.519	U
163	0605864N	TEST AND EVALUATION SUPPORT	6	272.802	276.468	278.838	U
164	0605865N	OPERATIONAL TEST AND EVALUATION CAPABILITY	6	9.970	11.546	12.642	U
165	0605866N	Navy SEW Support	6	3.115	3.385	3.242	U
166	0605867N	SEW SURVEILLANCE/RECONAISSANCE SUPPORT	6	11.577	16.347	12.120	U
167	0605873M	MARINE CORPS PROGRAM WIDE SUPPORT	6	21.153	20.133	12.208	U
168	0305885N	Cryptologic Program	6	4.623	0.000	0.000	U
169	0909998N	Problem Disbursements	6	0.064	0.000	0.000	U
170	0909999N	FINANCING FOR CANCELLED ACCOUNT ADJUSTMENT	6	15.232	0.000	0.000	U
Total RDTE Management Support				815.230	681.176	688.252	

UNCLASSIFIED

Department of the Navy
FY 2000 RDT&E Program
Alphabetic Listing

Exhibit R-1

APPROPRIATION: 1319n Research, Development, Test and Evaluation, Navy

DATE: February 2002

R-1 Line Number	Program Element Number	Item Nomenclature	Budget Activity	Thousands of Dollars			Security Classification
				FY 2001	FY 2002	FY 2003	
154	0605154N	CENTER FOR NAVAL ANALYSES	6	43.303	42.691	45.435	U
168	0305885N	Cryptologic Program	6	4.623	0.000	0.000	U
170	0909999N	FINANCING FOR CANCELLED ACCOUNT ADJUSTMENT	6	15.232	0.000	0.000	U
155	0605155N	Fleet Tactical Development	6	2.675	2.886	2.771	U
152	0604759N	MAJOR T&E INVESTMENT	6	43.838	44.111	42.453	U
158	0605853N	MANAGEMENT, TECHNICAL & INTERNATIONAL SUPPC	6	18.579	27.413	50.787	U
167	0605873M	MARINE CORPS PROGRAM WIDE SUPPORT	6	21.153	20.133	12.208	U
165	0605866N	Navy SEW Support	6	3.115	3.385	3.242	U
164	0605865N	OPERATIONAL TEST AND EVALUATION CAPABILITY	6	9.970	11.546	12.642	U
169	0909998N	Problem Disbursements	6	0.064	0.000	0.000	U
161	0605862N	RDT&E INSTRUMENTATION MODERNIZATION	6	14.352	13.382	13.289	U
160	0605861N	RDT&E SCIENCE AND TECHNOLOGY MANAGEMENT	6	55.256	54.340	59.447	U
162	0605863N	RDT&E SHIP AND AIRCRAFT SUPPORT	6	75.754	71.101	71.519	U
166	0605867N	SEW SURVEILLANCE/RECONAISSANCE SUPPORT	6	11.577	16.347	12.120	U
156	0605502N	SMALL BUSINESS INNOVATIVE RESEARCH	6	146.160	0.000	0.000	U
159	0605856N	STRATEGIC TECHNICAL SUPPORT	6	2.304	2.369	2.340	U
153	0605152N	STUDIES AND ANALYSIS SUPPORT - NAVY	6	8.269	5.926	4.071	U
151	0604258N	Target Systems Development	6	31.465	49.073	45.562	U
157	0605804N	TECHNICAL INFORMATION SERVICES	6	11.524	10.161	0.929	U
163	0605864N	TEST AND EVALUATION SUPPORT	6	272.802	276.468	278.838	U
150	0604256N	Threat Simulator Development	6	23.215	29.844	30.599	U
		Total RDTE Management Support		815.230	681.176	688.252	

**Fiscal Year 2003 Budget Estimates
Budget Appendix Extract Language**

**RESEARCH, DEVELOPMENT, TEST & EVALUATION, NAVY
(RDTEN)**

For expenses necessary for basic and applied scientific research, development, test and evaluation, including maintenance, rehabilitation, lease, and operation of facilities and equipment, [\$11,498,506,000] \$12,501,630,000, to remain available for obligation until September 30, [2003] 2004: *Provided, That funds appropriated in this paragraph which are available for the V-22 may be used to meet unique operational requirements of the Special Operations Forces. (10 U.S.C. 174, 2352-54, 7522; Department of Defense Appropriations Act, 2002; additional authorizing legislation required.)*

UNCLASSIFIED

CLASSIFICATION:

EXHIBIT R-2, RDT&E Budget Item Justification								DATE: February 2002			
APPROPRIATION/BUDGET ACTIVITY RESEARCH DEVELOPMENT TEST & EVALUATION, NAVY / BA-6						R-1 ITEM NOMENCLATURE 0604256N, Threat Simulator Development					
COST (\$ in Millions)	Prior Year Cost		FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	Cost to Complete	Total Program
Total PE Cost			23.215	29.844	30.599	29.095	30.188	30.696	31.261	Continuing	Continuing
E0602 Electronic Warfare Environment Sim (ECHO)			12.608	16.276	16.372	14.733	15.215	15.452	15.717	Continuing	Continuing
R0672 Effectiveness of Navy E.W. Systems (ENEWS)			10.607	13.568	14.227	14.362	14.973	15.244	15.544	Continuing	Continuing
Quantity of RDT&E Articles	Not Applicable										
<p>(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: This is a continuing program that consolidates the design, fabrication and integration of Naval Electronic Warfare (EW) threat simulators for increased managerial emphasis and coordination. These simulator development efforts provide realistic Developmental and Operational Test and Evaluation (DT&E/OT&E) environments to test Tri-Services EW systems and defensive tactics. These projects develop former Soviet and Free-World Anti-Air and Anti-Ship weapon systems simulators in accordance with the Services requirements.</p> <p>(U) The E0602 Project, EW Environment Simulation (ECHO) provides airborne system component level Test and Evaluation (T&E) at the Electronic Combat Simulation and Evaluation Laboratory (ECSEL), Naval Air Warfare Center Weapons Division (NAWCWD), Point Mugu, CA. ECHO also provides a secure anechoic closed loop T&E facility for fully integrated, aircraft-installed systems testing at the EW Integrated Systems Test Laboratory (EWISTL) at the Naval Air Warfare Center Aircraft Division (NAWCAD), Patuxent River, MD. Included in this Project is the T&E of airborne systems and tactics in flight, against the open air range at the Electronic Combat Range (ECR) complex located at the NAWCWD, China Lake, CA.</p> <p>(U) The R0672 Project (formally E0672), Effectiveness of Navy EW Systems (ENEWS), is a Department of the Navy (DON) unique project that supports Test and Evaluation of Ships EW efforts. ENEWS provides T&E for surface and subsurface shipboard systems and tactics in digitally modeled battle scenarios at the component, fully integrated single ship, multi-ship and full-up multi-platform battle group levels. ENEWS also provides a secure anechoic closed loop T&E facility specifically designed to test shipboard systems at the stand alone subsystem or fully integrated systems level. The last and largest portion of this project addresses the flyable Infrared and Radio Frequency simulators flown on specially configured NP-3D aircraft to provide at-sea open air T&E for systems and tactics. All ENEWS assets are developed, operated and maintained by the Naval Research Laboratory (NRL), Washington, DC.</p> <p>(U) JUSTIFICATION FOR BUDGET ACTIVITY: This program is funded under RDT&E MANAGEMENT SUPPORT because it supports the operations and installations required for general research, and development use.</p>											

R-1 SHOPPING LIST - Item No. 150

UNCLASSIFIED

Exhibit R-2, RDTEN Budget Item Justification
(Exhibit R-2, page 1 of 12)

UNCLASSIFIED

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification								DATE: February 2002			
APPROPRIATION/BUDGET ACTIVITY		PROGRAM ELEMENT NUMBER AND NAME				PROJECT NUMBER AND NAME					
RDT&E, N / BA-6		0604256N, Threat Simulator Development				E0602, ECHO					
COST (\$ in Millions)	Prior Year Cost		FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	Cost to Complete	Total Program
Project Cost			12.608	16.276	16.372	14.733	15.215	15.452	15.717	Continuing	Continuing
RDT&E Articles Qty	Not Applicable										
<p>(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: The objective of this project is development of necessary simulation facilities and approaches to allow determination of the effectiveness of EW in real world engagement situations and to support the introduction of modern, effective systems into Naval Aviation. The heavy use of test resources by all Services demonstrates the importance of these assets. The Navy has been very successful in executing all of its major programs, and to date has had no major technical problems.</p> <p>(U) The EW Environment Simulation (ECHO) project is unique in that it is the only program within the Department of Defense (DOD) which develops and provides Naval anti-air warfare threat assets for Testing and Evaluation (T&E) and is a critical part of the Office of the Secretary of Defense (OSD) Test Resource Master Plan. The OSD Master Plan employs many ECHO project resources for planning, analysis, testing and verification of airborne EW equipment.</p> <p>(U) This project directly supports the T&E requirements of the following programs: High Speed Anti-Radiation Missile, ALR-67(V)2,3,4, ALQ-126B, ALQ-156, EW Advanced Technology (EWAT), Integrated Defensive Electronic Countermeasures (IDECM) (including the Radio Frequency Countermeasures (RFCM), Common Missile Warning System (CMWS), and Advanced StrategicTactical Expenditures (ASTE) subsystem T&E milestones), AVR-2, AAR-47, ALE-50, as well as other Tri-Service EW systems with initial operational capability dates in the early 2000's.</p> <p>(U) This project provides for the development of an Integrated Air Defense T&E capability to be fielded at each of the three sites comprising the Navy's Tri-Center complex: NAWCWD, China Lake and Point Mugu in CA, and NAWCAD, Patuxent River, MD.</p>											

R-1 SHOPPING LIST - Item No. 150

UNCLASSIFIED

UNCLASSIFIED

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2002
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6	PROGRAM ELEMENT NUMBER AND NAME PE 0604256N, Threat Simulator Development	PROJECT NUMBER AND NAME E0602, ECHO
<p>(U) PROGRAM ACCOMPLISHMENTS AND PLANS :</p> <p>1. FY 2001 PLANS:</p> <ul style="list-style-type: none">- (U) (\$.457) Completed SUTLER HITCH to support ASTE, Navy Advanced Expendables.- (U) (\$1.468) Initiated IR Target Array.- (U) (\$1.099) Continued Advanced Multiple-Emitter Simulator Direction Finding Modification.- (U) (\$2.180) Continued Radar Signal Density Environment (RSDE) Mobile.- (U) (\$.350) Completed I-23 additional seeker integration.- (U) (\$1.200) Completed Blue Army Threat Seeker for Missile on Mountain (MOM).- (U) (\$2.469) Continued Hybrid Laboratory Simulator (HLS) MOBCAP Upgrades.- (U) (\$.326) Completed infrared ultra violet radio frequency (IR/UV/RF) Sensor/Facilities Integration.- (U) (\$.100) Continued Validation and Updates- SIMVAL.- (U) (\$.200) Continued Validation and Updates- Radar and Weapon Simulator Updates.- (U) (\$.400) Continued Validation and Updates- Validation.- (U) (\$1.080) Continued ECHO technical and engineering support.- (U) (\$.250) Continued ECHO System Engineering activity.- (U) (\$1.029) Continued ECHO Test Requirements activity.		

R-1 SHOPPING LIST - Item No. 150

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Exhibit R-2, RDTEN Budget Item Justification
(Exhibit R-2, page 3 of 12)

UNCLASSIFIED

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2002
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6	PROGRAM ELEMENT NUMBER AND NAME PE 0604256N, Threat Simulator Development	PROJECT NUMBER AND NAME E0602, ECHO
<p>(U) PROGRAM ACCOMPLISHMENTS AND PLANS:</p> <p>2. FY 2002 PLANS:</p> <ul style="list-style-type: none"> - (U) (\$1.015) Initiate IR/UV Mobile. - (U) (\$1.600) Initiate IR Stimulator. - (U) (\$2.618) Continue IR Target Array. - (U) (\$.750) Complete Advanced Multiple-Emitter Simulator Direction Finding Modification. - (U) (\$.200) Complete Radar Signal Density Environment (RSDE) Mobile. - (U) (\$.750) Initiate Advanced ManPads. - (U) (\$.500) Initiate Reprogrammable Early Warning (EW)/Acquisition (ACQ) Radar. - (U) (\$.900) Complete Hybrid Laboratory Simulator (HLS) MOBCAP Upgrades. - (U) (\$.243) Initiate Remote/Terminal Electronic Combat Range- Electronic Combat Simulation and Evaluation Laboratory (R/T ECR-ECSEL) Link. - (U) (\$.075) Initiate and complete Air Combat Environment Test and Evaluation Facility (ACETEF) IR Instrumentation. - (U) (\$2.897) Initiate 1 vs 1 IR Alert/Response. - (U) (\$.410) Initiate 1 vs 2 IR Alert/Response. - (U) (\$.100) Continue Validation and Updates- SIMVAL. - (U) (\$.375) Continue Validation and Updates- Radar and Weapon Simulator Updates. - (U) (\$.375) Continue Validation and Updates- Missile/Gun Updates. - (U) (\$.400) Continue Validation and Updates- Validation. - (U) (\$1.203) Continue ECHO technical and engineering support. - (U) (\$.331) Continue ECHO System Engineering activity. - (U) (\$1.041) Continue ECHO Test Requirements activity. -(U)(\$.493) Portion of extramural program reserved for Small Business Innovation Research assessment in accordance with 15USC 638. 		

R-1 SHOPPING LIST - Item No. 150

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Exhibit R-2, RDTEN Budget Item Justification
(Exhibit R-2, page 4 of 12)

UNCLASSIFIED

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2002
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6	PROGRAM ELEMENT NUMBER AND NAME PE 0604256N, Threat Simulator Development	PROJECT NUMBER AND NAME E0602, ECHO
<p>(U) PROGRAM ACCOMPLISHMENTS AND PLANS:</p> <p>3. FY 2003 PLANS:</p> <ul style="list-style-type: none">- (U) (\$.950) Complete IR/UV Mobile.- (U) (\$2.285) Continue IR Stimulator.- (U) (\$2.800) Complete IR Target Array.- (U) (\$.750) Continue Advanced ManPads.- (U) (\$.875) Continue Reprogrammable Early Warning (EW)/Acquisition (ACQ) Radar.- (U) (\$.235) Continue Remote/Terminal Electronic Combat Range- Electronic Combat Simulation and Evaluation Laboratory (R/T ECR-ECSEL) Link.- (U) (\$.263) Complete 1 vs 1 IR Alert/Response.- (U) (\$2.655) Continue 1 vs 2 IR Alert/Response.- (U) (\$1.295) Initiate 1 vs M RF Alert/Response.- (U) (\$.100) Continue Validation and Updates- SIMVAL.- (U) (\$.525) Continue Validation and Updates- Radar and Weapon Simulator Updates.- (U) (\$.450) Continue Validation and Updates- Missile/Gun Updates.- (U) (\$.400) Continue Validation and Updates- Validation.- (U) (\$1.308) Continue ECHO technical and engineering support.- (U) (\$.300) Continue ECHO System Engineering activity.- (U) (\$1.181) Continue ECHO Test Requirements activity.		

R-1 SHOPPING LIST - Item No. 150

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Exhibit R-2, RDTEN Budget Item Justification
(Exhibit R-2, page 5 of 12)

UNCLASSIFIED

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2002
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6	PROGRAM ELEMENT NUMBER AND NAME PE 0604256N, Threat Simulator Development	PROJECT NUMBER AND NAME E0602, ECHO

(U) B. PROGRAM CHANGE SUMMARY:

	FY2001	FY2002	FY2003
(U) FY 2002 President's Budget:	13.412	16.417	
(U) Adjustments from the FY2002 President's Budget:	-0.804	-0.141	
(U) FY 2003 President's Budget Submit:	12.608	16.276	16.372

CHANGE SUMMARY EXPLANATION:

(U) Funding: The FY 2001 decrease of \$0.804 million reflects a decrease of \$0.717 million for reprioritization of requirements within the Navy and a decrease of \$ 0.087 million for Small Business Innovative Research assessment. FY 2002 net decrease of \$.141 reflects a decrease of \$.145 million for an undistributed congressional reduction offset by an increase of \$.004 million which will be used for system engineering support.

(U) Schedule: Schedule changes from the President's budget are a direct result of the funding changes identified above. The FY 2001 decrease resulted in a 3 month slip in the Hybrid Laboratory Simulator (HLS) MOBCAP effort IOC (from 3rd QTR FY02 to 4th QTR FY02) and a 3 month slip in the IR Target Array prototype analysis and design schedule.

(U) Technical: Not Applicable.

(U) C. OTHER PROGRAM FUNDING SUMMARY: Not applicable

(U) D. ACQUISITION STRATEGY: The Electronic Warfare Threat Simulator Development program is a Non-ACAT Program which operates in accordance with the OPNAV approved Electronic Warfare Test and Evaluation Resource Investment Strategy (with no specific acquisition strategies). The Electronic Warfare Environment Simulation Project, under the Threat Simulator Development Program, is unique in that it is the only program within the Department of Defense dedicated solely to developing and providing Naval threat assets for test and evaluation and is a critical part of the Under Secretary of Defense for Acquisition (USD(A)) annual Electronic Warfare Plan. This plan employs many of the Electronic Warfare Simulation Development project resources for the planning, analysis, testing, and verification of airborne EW equipment. To preclude unwarranted intra-Service and inter-Service duplication, T&E resource requirements are coordinated through the OSD Test Investment Coordinating Committee and the Navy Tri-Center complex for mutual support, cost reduction, and increased test effectiveness. The Navy's Electronic Warfare Test and Evaluation Resource Investment Strategy emphasizes a coordinated analysis and prioritization of Navy EW T&E requirements and implementation of disciplined design-to-cost techniques.

(U) E. SCHEDULE PROFILE: Not applicable

UNCLASSIFIED

CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 1)										DATE: February 2002		
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6			PROGRAM ELEMENT PE 0604256N, Threat Simulator Development			PROJECT NUMBER AND NAME E0602, ECHO						
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 01 Cost	FY 01 Award Date	FY 02 Cost	FY 02 Award Date	FY 03 Cost	FY 03 Award Date	Cost to Complete	Total Cost	Target Value of Contract
IR Target Array	C/CPFF	TSC, Los Angeles, CA		0.700	11/00	1.000	11/01	1.000	11/02	1.500	4.200	4.200
IR Target Array	WX	NAWC-WD, China Lake, CA		0.836	10/00	1.563	10/01	1.600	10/02	1.300	5.299	5.299
IR Target Array	C/CPFF	EWA, Ridgecrest, CA		0.200	11/00	0.200	11/01	0.200	11/02	0.200	0.800	0.800
AMES DF Modification	C/FFP	COMPTEK, Elmhurst, NY	2.511	0.750	11/00	0.500	11/01				3.761	3.761
RSDE Mobile	WX	NAWC-WD, China Lake, CA	1.668	2.180	11/00	0.200	10/01				4.048	4.048
Blue Army Seeker	C/CPFF	GTRI, Atlanta, GA	1.729	0.690	11/00						2.419	2.419
HLS MOBCAP	C/CPFF	EWA, Marlton, NJ	1.700	1.649	11/00	0.618	11/01				3.967	3.967
Award Fees		EWA, Marlton, NJ	0.120	0.095	11/00	0.043	11/01				0.258	0.258
IR/UV Mobile	C/CPFF	TBD, China Lake, CA				0.800	03/02	0.700	11/02		1.500	1.500
IR Stimulator	C/CPFF	TSC, Los Angeles, CA				0.700	11/01	0.800	11/02	0.700	2.200	2.200
1V1 IR Alert/Response	C/CPFF	EWA, Ridgecrest, CA				3.197	03/02	0.263	11/02		3.460	3.460
1V2 IR Alert/Response	C/CPFF	EWA, Ridgecrest, CA				0.410	03/02	2.655	11/02	0.450	3.515	3.515
IR Stimulator	WX	NAWC-WD, China Lake, CA				0.900	11/01	1.485	10/02	1.275	3.660	
Hdw/Sw Dev. Systems Engineering	WX	NAWC-WD, China Lake, CA	50.359	3.499	11/00	3.612	11/01	4.579	10/02	Continuing	Continuing	
Miscellaneous	Various	NAWC-WD, China Lake, CA	20.898	1.854	02/01	1.890	02/02	2.962	10/02	Continuing	Continuing	
Subtotal Product Development			78.985	12.453		15.633		16.244		Continuing	Continuing	
Remarks:												

R-1 SHOPPING LIST - Item No. 150

UNCLASSIFIED

Exhibit R-2, RD TEN Budget Item Justification
(Exhibit R-2, page 7 of 12)

UNCLASSIFIED

CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 2)								DATE: February 2002				
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NUMBER AND NAME						
RDT&E, N / BA-6			PE 0604256N, Threat Simulator Development			E0602, ECHO						
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 01 Cost	FY 01 Award Date	FY 02 Cost	FY 02 Award Date	FY 03 Cost	FY 03 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Subtotal T&E												
Remarks: Not Applicable												
Travel	WX	NADEP, Jax, FL	0.069	0.015	10/00	0.010	10/01	0.010	10/02	Continuing	Continuing	
Misc.	RX	Various		0.140	10/00	0.140	10/01	0.118	10/02	Continuing	Continuing	
SBIR Assessment	RX	TBD				0.493					0.493	
Subtotal Management			0.069	0.155		0.643		0.128		Continuing	Continuing	
Remarks:												
Total Cost			79.054	12.608		16.276		16.372		Continuing	Continuing	
Remarks: There are no support costs.												

R-1 SHOPPING LIST - Item No. 150

UNCLASSIFIED

UNCLASSIFIED

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification								DATE:				
								February 2002				
APPROPRIATION/BUDGET ACTIVITY		PROGRAM ELEMENT NUMBER AND NAME				PROJECT NUMBER AND NAME						
RDT&E, N / BA-6		0604256N, Threat Simulator Development				R0672, Effectiveness of Navy Electronic Warfare Systems (ENEWS)						
COST (\$ in Millions)		Prior Year Cost		FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	Cost to Complete	Total Program
Project Cost				10.607	13.568	14.227	14.362	14.973	15.244	15.544	Continuing	Continuing
RDT&E Articles Qty												
<p>(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: The objective of the Effectiveness of Navy Electronic Warfare (EW) Systems (ENEWS) Project is the development and application of necessary simulation assets to determine the effectiveness of EW for navy ships in simulated real-world engagement situations. The Project primarily supports the introduction of modern, effective shipboard and offboard EW systems, and tactics for the Surface Navy. The heavy use of ENEWS resources by Naval Sea Systems Command (NAVSEA), Operational Test and Evaluation Force (OPTEVFOR), Special Operations and other EW Research Development Test and Evaluation (RDT&E) agencies speaks to the overall importance of this Project. The Project provides support for EW system Design Engineering Test (ET), Development Test (DT), Operational Test (OT), and the development of utilization tactics. Its quick reaction capabilities have had great impact on crisis situations such as the Lebanon and Libyan crises, Iran Harpoon threat, Persian Gulf crisis and Operation Desert Storm/Shield. The primary threat to surface ships is Anti-Ship Capable Missile (ASCM) systems. The ENEWS Project is unique in that it is the only project within the Department of Defense (DOD) dedicated to developing and providing realistic ASCM assets to test and evaluate the effectiveness of shipboard EW systems and tactics against these type threats. The ENEWS Project is a critical part of the Office of the Secretary of Defense (OSD) Test Resource Master Plan. This plan employs many of the ENEWS assets for planning, analysis, testing and verification of shipboard and offboard EW systems, techniques and tactics. As part of its normal activities, ENEWS provides Development Test and Evaluation (DT&E), Operations Test and Evaluation (OT&E) and Forces Operations Test and Evaluation (FOT&E) support to the Surface Navy for all ship classes. DT, OT and Forces Operational Test (FOT) support includes SLQ-32 updates as required, R17.OX (NULKA), the phase-in of AIEWS [AN/SLY-2(V)] beginning in FY-00, Rapid Anti-ship Integrated Defense System (RAIDS), all MK245 Giant tests, Advanced Infrared (IR) Decoys, Decoy placement (Littoral), Ship IR Signature and Radar Cross Section (RCS) measurement of DDG-51, LPD-17, DD-21 and PC class ships, AN/SLY-2(V) phase two, High Power Microwave (HPM) Program, and other Ship Self-Defense initiatives, including test and evaluation of Future Navy Initiatives Capability (FNC) process. In addition, ENEWS assets are regularly employed to test the effectiveness of North Atlantic Treaty Organization (NATO) ships' EW systems in Joint Allied Exercises</p> <p>(U) PROGRAM ACCOMPLISHMENTS AND PLANS:</p> <p>1. FY 2001 ACCOMPLISHMENTS:</p> <ul style="list-style-type: none">- (U) (\$.625) Continued Computer Simulation (COMSIM) Readiness- (U) (\$.257) Continued COMSIM Scenario Implementation, Environment Generator & System Engineering (Completed Radar/Tactics Model Transitions)- (U) (\$.083) Continued COMSIM Validation (Completed 1 Validation Report)- (U) (\$.106) Continued COMSIM Treat Database Repository Updates- (U) (\$1.593) Continued Radio Frequency Simulation (RFSIM) Simulator Readiness- (U) (\$1 .150) Continued RFSIM Multi-threat Processor Upgrade. (I-band)- (U) (\$.274) Continued RFSIM Validation (Completed 2 Validation Reports)- (U) (\$.035) Continued RFSIM Dual Radio Frequency (RF)/Anti-Radiation Missile (ARM) Seeker Simulator- (U) (\$.050) Continued RFSIM Analytical and Reporting Software (Completed November Tools)- (U) (\$1 .215) Continued Infrared Simulation (IRSIM) Simulator Readiness- (U) (\$.075) Continued IRSIM VICTOR Simulator Upgrades (SIM B and SIM 3a) and System Engineering- (U) (\$.079) Continued IRSIM Validation (Completed 1 Validation Report)												

R-1 SHOPPING LIST - Item No. 150

UNCLASSIFIED

Exhibit R-2, RDTEN Budget Item Justification
(Exhibit R-2, page 9 of 12)

UNCLASSIFIED

CLASSIFICATION: UNCLASSIFIED

EXHIBIT R-2a, RDT&E Project Justification		DATE:
		February 2002
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA-6	0604256N, Threat Simulator Development	R0672, Effectiveness of Navy Electronic Warfare Systems (ENEWS)
<p>(U) PROGRAM ACCOMPLISHMENTS AND PLANS:</p> <p>- (U) (\$.819) Continue ENEWS Plans and Programs</p> <p>- (U) (\$4.246) Initiated Classified Program</p> <p>2. FY 2002 PLANS :</p> <p>. (U) (\$1.161) Continue Simulator Hardware Upgrades (Continue Multi-Threat Processor Upgrade. (I-band))</p> <p>. (U) (\$1 .004) Continue Simulator Software Upgrades (Initiate/Complete IRSIM VICTOR Simulator Upgrades)</p> <p>.- (U) (\$.196) Continue Simulator Characterization (Characterize 6 Simulators)</p> <p>. (U) (\$.880) Continue Simulator Maintenance (Maintain 21 Simulators)</p> <p>. (U) (\$.345) Continue Simulator Control Panels (Initiate/Complete IRSIM FOXTROT SIM1 Control Panel)</p> <p>. (U) (\$1.195) Continue Laboratory Facilities</p> <p>. (U) (\$.190) Continue Threat Repository</p> <p>. (U) (\$.640) Continue Simulation Instrumentation</p> <p>. (U) (\$.505) Continue Simulation Validation (Complete 4 Validation Reports)</p> <p>. (U) (\$.892) Continue Electronic Attack (EA)/Electronic Support (ES) Simulations</p> <p>. (U) (\$.460) Continue Program Management</p> <p>- (U) (\$6.100) Continue Classified Program</p> <p>3. FY 2003 PLANS:</p> <p>- (U) (\$1.080) Continue Simulator Hardware Upgrades (Continue Multi-threat Processor Upgrade. (I-band))</p> <p>. (U) (\$.745) Continue Simulator Software Upgrades (Initiate/Complete IRSIM VICTOR Simulator Upgrades)</p> <p>. (U) (\$.205) Continue Simulator Characterization (Characterize 6 Simulators)</p> <p>. (U) (\$.845) Continue Simulator Maintenance (Maintain 21 Simulators)</p> <p>. (U) (\$.325) Continue Simulator Control Panels (Initiate/Complete RFSIM November II and IRSIM MEIR Simulator Control Panels)</p> <p>. (U) (\$1.100) Continue Laboratory Facilities</p> <p>. (U) (\$.195) Continue Threat Repository</p> <p>. (U) (\$.406) Continue Simulation Instrumentation</p> <p>. (U) (\$.610) Continue Simulation Validation (Complete 5 Validation Reports)</p> <p>. (U) (\$.699) Continue EA/ES Simulations</p> <p>. (U) (\$.617) Continue Program Management</p> <p>- (U) (\$7.400) Continue Classified Program</p>		

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Exhibit R-2, RDTEN Budget Item Justification
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CLASSIFICATION: UNCLASSIFIED

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2002
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6	PROGRAM ELEMENT NUMBER AND NAME 0604256N, Threat Simulator Development	PROJECT NUMBER AND NAME R0672, Effectiveness of Navy Electronic Warfare Systems (ENEWS)

(U) B. PROGRAM CHANGE SUMMARY:

	FY2001	FY2002	FY2003
(U) FY 2002 President's Budget:	10.638	13.689	
(U) Adjustments from the FY2002 President's Budget:	-0.031	-0.121	
(U) FY 2003 President's Budget :	10.607	13.568	14.227

CHANGE SUMMARY EXPLANATION:

(U) Funding: The FY 2001 net decrease of \$.031 million consists of an increase of \$.039 million for execution adjustments and a decrease of \$.070 million for SBIR reduction. The FY 2002 net decrease of \$.121 million is due to Section 8123 management reform initiative adjustment.

(U) Schedule: Not Applicable

(U) Technical: Starting in FY01 the Project was reduced by approximately 50% with funding being applied to a separate classified program. Future Project plans to accomplish stated technical objectives for threat simulator development have been re-baselined and re-prioritized to accommodate this change. Tasks from the previous R-2 have been addressed in the new baseline and mapped into the new R-2 commencing FY02 as follows: COMSIM System Readiness= LAB Facilities; COMSIM Scenario Implementation...Engineering=EA/ES Simulations; COMSIM Validation= Simulator Validation; COMSIM Threat Database Repository Updates=Threat Repository; RF Simulator Readiness= Simulator hardware and software upgrades, simulator characterization, simulator maintenance, and simulator control panels; RFSIM Multi-Threat Processor upgrade= Simulator hardware and software upgrades; RF Validation= Simulator Validation; RFSIM Dual Mode RF/ARM Seeker Simulator= Simulator hardware and software upgrades; RFSIM Analytical and Reporting System= Simulator instrumentation; IR Readiness= Simulator hardware and software upgrades; IRSIM Victor Simulator Upgrades= Simulator hardware and software upgrades; IRSIM Validation=Simulator Validation; ENEWS Plans and Programs= Program Management.

(U) C. OTHER PROGRAM FUNDING SUMMARY: Not Applicable

(U) D. ACQUISITION STRATEGY: * Not Required

(U) E. SCHEDULE PROFILE: * Not Required

* Not required for Budget Activities 1, 2, 3, and 6.

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Exhibit R-2, RDTEN Budget Item Justification
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Exhibit R-2, RD TEN Budget Item Justification
(Exhibit R-2, page 12 of 12)

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UNCLASSIFIED

CLASSIFICATION:

EXHIBIT R-2, RDT&E Budget Item Justification								DATE: February 2002				
APPROPRIATION/BUDGET ACTIVITY RESEARCH DEVELOPMENT TEST & EVALUATION, NAVY						R-1 ITEM NOMENCLATURE 0604258N TARGET SYSTEMS DEVELOPMENT (TSD)						
COST (\$ in Millions)		Prior Year Cost		FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	Cost to Complete	Total Program
Total PE Cost				31.465	49.073	45.562	40.128	40.854	45.885	47.226	Continuing	Continuing
20612 Surface Targets Development				1.101	1.139	1.138	1.137	1.190	1.208	1.227	Continuing	Continuing
K3045 Terrier/SSST						2.983	2.985					5.968
A0609 Aerial Target Systems Development				20.697	36.426	29.342	23.906	24.069	14.534	14.833	Continuing	Continuing
A0610 Weapon Systems T&E Development/Procurement				9.667	11.508	12.099	12.100	15.595	30.143	31.166	Continuing	Continuing
Quantity of RDT&E Articles				3	4	4	4	4	4	4		
(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: This program element funds the development and procurement of aerial and surface targets and associated Target Augmentation and Auxiliary Systems (TA/AS) necessary to duplicate or simulate threat characteristics in support of weapons systems test and evaluation and fleet training. Included within this program element are development of: Subsonic Subscale Aerial Target (SSAT), various TA/AS, Target Threat Characterization (TTC), Supersonic Sea Skimming Target (SSST), Navy Full Scale Aerial Target (FSAT) for conversions, the FSAT Follow-On (FO), surface targets for test and evaluation, surface towed targets, improved target control system, and an anti-radiation missile target. This program element also includes Vandal Extended Extended Range testing and procurement of TA/AS Vector Scoring.												
(U) B. JUSTIFICATION FOR BUDGET ACTIVITY: This program is funded under RDT&E Management Support because it supports the operations and installations required for general research and development use.												

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Exhibit R-2, RDTEN Budget Item Justification
(Exhibit R-2, page 1 of 16)

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CLASSIFICATION:

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EXHIBIT R-2a, RDT&E Project Justification							DATE: February 2002			
APPROPRIATION/BUDGET ACTIVITY RDT&E, N	PROGRAM ELEMENT NAME AND NUMBER 0604258N/Target Systems Development				PROJECT NAME AND NUMBER 20612/Surface Targets Development					
COST (\$ in Millions)	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007		Cost to Complete	Total Cost
Project Cost	1.101	1.139	1.138	1.137	1.190	1.208	1.227		CONT.	CONT.
RDT&E Articles Qty	1	1	1	1	1	1	1			
A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: This project develops seaborne targets systems and their related target augmentation systems in support of air-to-surface and surface-to-surface weapons test and evaluation and fleet training.										
FY 2001 ACCOMPLISHMENTS: - (\$0.045) Continued Requirements Study Update. (Oct 00-Sep 01) - (\$0.175) Continued Weapons System/Emitter, TAS Upgrade. (Oct 00-Sep 01) - (\$0.060) Continued Target/Threat Characterization and Validation. (Oct 00-Sep 01) - (\$0.275) ContinuedCommand and Control System Upgrade Development. (Oct 00-Sep 01) - (\$0.306) Continued development of Target Scoring System. (Oct 00-Sep 01) - (\$0.240) Procured prototype off-the-shelf boat for testing and evaluation of enhanced HSMST. (Oct 00-Sep 01)										
FY 2002 PLAN: - (\$0.050) Continue Requirements Study Update. (Oct 01-Sep 02) - (\$0.185) Continue Weapons System/Emitter, TAS Upgrade. (Oct 01-Sep 02) - (\$0.065) Continue Target/Threat Characterization and Validation. (Oct 01-Sep 02) - (\$0.285) Continue Command and Control System Upgrade Development. (Oct 01-Sep 02) - (\$0.310) Continue development of Target Scoring System. (Oct 01-Sep 02) - (\$0.244) Procure prototype off-the-shelf boat for testing and evaluation of enhanced HSMST. (Oct 01-Sep 02)										
FY 2003 PLAN: - (\$0.047) Continue Requirements Study Update. (Oct 02-Sep 03) - (\$0.175) Continue Weapons System/Emitter, TAS Upgrade. (Oct 02-Sep 03) - (\$0.070) Continue Target/Threat Characterization and Validation. (Oct 02-Sep 03) - (\$0.178) Continue Command and Control System Upgrade Development. (Oct 02-Sep 03) - (\$0.190) Continue development of Target Scoring System. (Oct 02-Sep 03) - (\$0.478) Procure prototype off-the-shelf boat for testing and evaluation for QST-35 replacement. (Oct 02-Sep 03)										

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Exhibit R-2a, RDT&E Project Justification
(Exhibit R-2a, page 2 of 16)

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CLASSIFICATION:

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EXHIBIT R-2a, RDT&E Project Justification								DATE: February 2002																																							
APPROPRIATION/BUDGET ACTIVITY RDT&E, N			PROGRAM ELEMENT NAME AND NUMBER 0604258N/Target Systems Development				PROJECT NAME AND NUMBER 20612/Surface Targets Development																																								
<p>B. Program Change Summary:</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th style="text-align: right;">FY 2001</th> <th style="text-align: right;">FY 2002</th> <th style="text-align: right;">FY 2003</th> </tr> </thead> <tbody> <tr> <td>FY 2002 President's Budget:</td> <td style="text-align: right;">1 .127</td> <td style="text-align: right;">1.149</td> <td></td> </tr> <tr> <td>Adjustments from President's Budget:</td> <td style="text-align: right;">-26</td> <td style="text-align: right;">-10</td> <td></td> </tr> <tr> <td>FY 2003 Pres Budget Submit:</td> <td style="text-align: right;">1.101</td> <td style="text-align: right;">1.139</td> <td style="text-align: right;">1.138</td> </tr> </tbody> </table> <p>CHANGE SUMMARY EXPLANATION:</p> <p style="margin-left: 40px;">Funding: The FY 2001 net decrease of \$26.0 million consists of \$8.0 million .7% Pro-Rata reduction, \$2.0 million Government-wide Recission, and a \$3 million SBIR, \$13.01 million actuals.</p> <p style="margin-left: 40px;">The FY 2002 net decrease of \$10.0 million consists of \$10 million Management Reserve.</p> <p style="margin-left: 40px;">Schedule: Not applicable.</p> <p>OTHER PROGRAM FUNDING SUMMARY:</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th style="text-align: right;">FY 2001</th> <th style="text-align: right;">FY 2002</th> <th style="text-align: right;">FY 2003</th> <th style="text-align: right;">FY 2004</th> <th style="text-align: right;">FY 2005</th> <th style="text-align: right;">FY 2006</th> <th style="text-align: right;">FY 2007</th> <th style="text-align: right;">Complete</th> <th style="text-align: right;">To Cost</th> <th style="text-align: right;">Total</th> </tr> </thead> <tbody> <tr> <td>OPN Line 545500 ASW Range Support Equipment</td> <td style="text-align: right;">6,807</td> <td style="text-align: right;">5,959</td> <td style="text-align: right;">7,350</td> <td style="text-align: right;">7,742</td> <td style="text-align: right;">7,801</td> <td style="text-align: right;">7,924</td> <td style="text-align: right;">8,097</td> <td style="text-align: right;">CONT.</td> <td style="text-align: right;">CONT.</td> <td></td> </tr> </tbody> </table> <p style="margin-left: 40px;">Related RDT&E: Not applicable</p> <p>D. ACQUISITION STRATEGY: Not applicable</p> <p>E. SCHEDULE PROFILE: Not applicable</p>											FY 2001	FY 2002	FY 2003	FY 2002 President's Budget:	1 .127	1.149		Adjustments from President's Budget:	-26	-10		FY 2003 Pres Budget Submit:	1.101	1.139	1.138		FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	Complete	To Cost	Total	OPN Line 545500 ASW Range Support Equipment	6,807	5,959	7,350	7,742	7,801	7,924	8,097	CONT.	CONT.	
	FY 2001	FY 2002	FY 2003																																												
FY 2002 President's Budget:	1 .127	1.149																																													
Adjustments from President's Budget:	-26	-10																																													
FY 2003 Pres Budget Submit:	1.101	1.139	1.138																																												
	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	Complete	To Cost	Total																																					
OPN Line 545500 ASW Range Support Equipment	6,807	5,959	7,350	7,742	7,801	7,924	8,097	CONT.	CONT.																																						

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Exhibit R-2a, RDT&E Project Justification
(Exhibit R-2a, page 3 of 16)

UNCLASSIFIED

CLASSIFICATION:

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EXHIBIT R-2a, RDT&E Project Justification							DATE: January 2002			
APPROPRIATION/BUDGET ACTIVITY RDT&E, N/BA-6	PROGRAM ELEMENT NAME AND NUMBER Target Systems Development/0604258N				PROJECT NAME AND NUMBER Terrier/SSST K3045					
COST (\$ in Millions)	PYs	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	Cost to Complete	Total Cost
Project Cost				2.983	2.985					5.968
RDT&E Articles Qty										
<p>A. (U) Mission Description and Budget Item Justification: This project funds the Supersonic Sea Skimming Target (SSST) program to provide both a low-fidelity and a moderate-fidelity Terrier Missile Target (TMT) for training the US Navy against a supersonic sea skimming threat. Major efforts involve integrating a Flight Termination System (FTS), running 6-DOF simulations, recertifying rocket motors, modifying the launch control system, modifying the initialization code, and the build up and firing of rounds.</p> <p>(U) PROGRAM ACCOMPLISHMENTS AND PLANS:</p> <p>1. (U) FY 2003 PLAN:</p> <ul style="list-style-type: none"> - (U) (\$1.1 million) Integrate an FTS, run 6-DOF simulations, recertify rocket motors, modify the launch control system, modify the initializer, and fire two test rounds for the low-fidelity SSST configuration - (U) (\$1.883 million) Establish detailed moderate-fidelity SSST program to include a low-drag nosecone, altimeter, and destruct charge, develop a delayed rocket motor ignition switch, build an IOM, and code software 										

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Exhibit R-2a, RDT&E Project Justification
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CLASSIFICATION:

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EXHIBIT R-2a, RDT&E Project Justification			DATE:
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NAME AND NUMBER	PROJECT NAME AND NUMBER	
RDT&E, N / BA-6	0604258N/Target Systems Development	Terrier/SSST K3045	
 B. Program Change Summary :			
	FY 2001	FY 2002	FY 2003
FY 2002 President's Budget:			
Adjustments from FY 2002 President's Budget			
FY 2003 President Budget Submit:			
			2.983
 CHANGE SUMMARY EXPLANATION:			
Funding: Not applicable.			
Schedule: Not applicable.			
 OTHER PROGRAM FUNDING SUMMARY: Not applicable			
Related RDT&E: Not applicable			
 D. ACQUISITION STRATEGY: Not applicable			
 E. SCHEDULE PROFILE: Not applicable			

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Exhibit R-2a, RDT&E Project Justification
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CLASSIFICATION:

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Exhibit R-3 Cost Analysis (page 1)						DATE: February 2002						
APPROPRIATION/BUDGET ACTIVITY RDT&E, N/BA-6			PROGRAM ELEMENT Target Systems Development/0604258N			PROJECT NAME AND NUMBER Terrier/SSST K3045						
Cost Categories (Tailor to WBS, or System/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 01 Cost	FY 01 Award Date	FY 02 Cost	FY 02 Award Date	FY 03 Cost	FY 03 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Ancillary Hardware Development	WR	NSWC/IHD						0.075	10/03	0.075	0.150	0.150
Systems Engineering	WR	JHU/APL						0.175	10/03	0.175	0.350	0.350
	SS/CPAF	Raytheon Missile Systems, Tucson,						2.233	11/03	2.235	4.468	4.468
Award Fees								0.175		0.175	0.350	0.350
Subtotal Product Development								2.658		2.660	5.318	5.318
Remarks:												
Integrated Logistics Support	WR	NSWC/PHD						0.100	10/03	0.100	0.200	0.200
Configuration Management	WR	VARIOUS						0.025	10/03	0.025	0.050	0.050
Subtotal Support								0.125		0.125	0.250	0.250
Remarks:												

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Exhibit R-3, Project Cost Analysis
(Exhibit R-3, page 6 of 16)

UNCLASSIFIED

CLASSIFICATION:

UNCLASSIFIED

Exhibit R-3 Cost Analysis (page 2)						DATE: January 2002						
APPROPRIATION/BUDGET ACTIVITY RDT&E, N/BA-6			PROGRAM ELEMENT Target Systems Development/0604258N			PROJECT NAME AND NUMBER Terrier/SSST K3045						
Cost Categories (Tailor to WBS, or System/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 01 Cost	FY 01 Award Date	FY 02 Cost	FY 02 Award Date	FY 03 Cost	FY 03 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Developmental Test & Evaluation	WR	PMRF, Pacific Missile Missile						0.075	10/03	0.075	0.150	0.150
	WR	VAR						0.025	10/03	0.025	0.050	0.050
Subtotal T&E								0.100		0.100	0.200	0.200
Contractor Engineering Support	VAR	VAR						0.050	10/03	0.050	0.100	0.100
Program Management Support	VAR	VAR						0.025	10/03	0.025	0.050	0.050
Travel	PD	NAVSEA HQ						0.025	10/03	0.025	0.050	0.050
Subtotal Management								0.100		0.100	0.200	0.200
Remarks:												
Total Cost								2.983		2.985	5.968	5.968
Remarks:												

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Exhibit R-3, Project Cost Analysis

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CLASSIFICATION: UNCLASSIFIED

EXHIBIT R-2a, RDT&E Project Justification							DATE: February 2002			
APPROPRIATION/BUDGET ACTIVITY		PROGRAM ELEMENT NUMBER AND NAME				PROJECT NUMBER AND NAME				
RDT&E, N / BA-6		0604258N Target Systems Development (TSD)				A0609 Aerial Target Systems Development				
COST (\$ in Millions)	Prior Year Cost	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	Cost to Complete	Total Program
Project Cost		20.697	36.426	29.342	23.906	24.069	14.534	14.833	Continuing	Continuing
RDT&E Articles Qty	Not Applicable									
<p>(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: Aerial Target Systems and associated target augmentation and auxiliary systems are developed in response to the need to test and provide training for Joint strike and littoral warfare systems required to defend fleet surface and air units in a hostile environment. The threat envelope covered extends from the surface to 100K feet for speeds in the low subsonic range to MACH 4.</p> <p>(U) B. PROGRAM ACCOMPLISHMENTS AND PLANS:</p> <p>1. FY 2001 Accomplishments:</p> <ul style="list-style-type: none"> -(U) \$5.655 Continued Subsonic Subscale Aerial Target (SSAT) Development. -(U) \$0.488 Continued Target Threat Characterization (TTC). -(U) \$1.746 Continued Target Augmentation and Auxillary Systems (TA/AS) development. -(U) \$11.700 Continued Supersonic Sea Skimming Target (SSST) development. -(U) \$1.108 Continued Target Support. <p>2. FY 2002 Plans:</p> <ul style="list-style-type: none"> -(U) \$16.738 Continue Subsonic Subscale Aerial Target (SSAT) Development. -(U) \$0.582 Continue Target Threat Characterization (TTC). -(U) \$4.003 Continue Target Augmentation and Auxillary Systems (TA/AS) development. -(U) \$12.921 Continue Supersonic Sea Skimming Target (SSST) development. -(U) \$1.079 Continue Target Support. -(U) \$1.103 Portion of extramural program reserved for Small Business Innovation Research Assessment in accordance with 15USC 68 <p>3. FY2003 Plans:</p> <ul style="list-style-type: none"> -(U) \$20.563 Continue Subsonic Subscale Aerial Target (SSAT) Development. -(U) \$0.582 Continue Target Threat Characterization (TTC) -(U) \$3.705 Continue Target Augmentation and Auxiliary Systems (TA/AS) Development -(U) \$4.492 Continue Supersonic Sea Skimming Target (SSST) Development <p>Note: Continued Target Support repread to other Aerial Target Systems Development programs.</p>										

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Exhibit R-2a, Project Justification
(Exhibit R-3, page 8 of 16)

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification				DATE: February 2002																																			
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6		PROGRAM ELEMENT NUMBER AND NAME 0604258N Target Systems Development (TSD)		PROJECT NUMBER AND NAME A0609 Aerial Target Systems Development																																			
<p>(U) C. PROGRAM CHANGE SUMMARY:</p> <table style="width: 100%; margin-top: 10px;"> <thead> <tr> <th></th> <th style="text-align: right;"><u>FY2001</u></th> <th style="text-align: right;"><u>FY2002</u></th> <th style="text-align: right;"><u>FY2003</u></th> </tr> </thead> <tbody> <tr> <td>(U) FY 2002 President's Budget:</td> <td style="text-align: right;">29.795</td> <td style="text-align: right;">36.751</td> <td></td> </tr> <tr> <td>(U) Adjustments from the President's Budget:</td> <td style="text-align: right;">-9.098</td> <td style="text-align: right;">-0.325</td> <td></td> </tr> <tr> <td>(U) FY 2003 Presidents Budget:</td> <td style="text-align: right;">20.697</td> <td style="text-align: right;">36.426</td> <td style="text-align: right;">29.342</td> </tr> </tbody> </table> <p>(U) D. CHANGE SUMMARY EXPLANATION:</p> <p style="margin-top: 10px;">(U) Funding: The FY 2001 net decrease of \$9.098 million consist of a \$8.256 million decrease for reprioritization of requirements within the Navy and a \$0.842 million decrease for a Small Business Innovative Research assessment. The FY 2002 decrease of \$0.325 million is for an undistributed congressional reduction.</p> <p>(U) Schedule: Not required.</p> <p>(U) Technical: Not required.</p> <p>(U) E. OTHER PROGRAM FUNDING SUMMARY:</p> <table style="width: 100%; margin-top: 10px;"> <thead> <tr> <th style="text-align: left;"><u>Line Item No. & Name</u></th> <th style="text-align: right;"><u>FY 2001</u></th> <th style="text-align: right;"><u>FY 2002</u></th> <th style="text-align: right;"><u>FY 2003</u></th> <th style="text-align: right;"><u>FY 2004</u></th> <th style="text-align: right;"><u>FY 2005</u></th> <th style="text-align: right;"><u>FY 2006</u></th> <th style="text-align: right;"><u>FY 2007</u></th> <th style="text-align: right;"><u>To Complete</u></th> </tr> </thead> <tbody> <tr> <td>228000 WPN</td> <td style="text-align: right;">57.766</td> <td style="text-align: right;">58.356</td> <td style="text-align: right;">70.332</td> <td style="text-align: right;">71.824</td> <td style="text-align: right;">78.366</td> <td style="text-align: right;">152.908</td> <td style="text-align: right;">90.922</td> <td style="text-align: right;">Continuing</td> </tr> </tbody> </table> <p style="margin-top: 10px;">Related RDT&E (U) P.E. 0207161N (Tactical Air Intercept) (U) P.E. 0207163N (Advanced Medium Range Air-to-Air Missile)</p> <p>(U) F. ACQUISITION STRATEGY: Not required</p> <p>(U) G. SCHEDULE PROFILE: Not required</p>							<u>FY2001</u>	<u>FY2002</u>	<u>FY2003</u>	(U) FY 2002 President's Budget:	29.795	36.751		(U) Adjustments from the President's Budget:	-9.098	-0.325		(U) FY 2003 Presidents Budget:	20.697	36.426	29.342	<u>Line Item No. & Name</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>To Complete</u>	228000 WPN	57.766	58.356	70.332	71.824	78.366	152.908	90.922	Continuing
	<u>FY2001</u>	<u>FY2002</u>	<u>FY2003</u>																																				
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<u>Line Item No. & Name</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>To Complete</u>																															
228000 WPN	57.766	58.356	70.332	71.824	78.366	152.908	90.922	Continuing																															

R-1 SHOPPING LIST - Item No. 151

Exhibit R-2a, R&D Project Justification

(Exhibit R-3, page 9 of 16)

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CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 1)							DATE: February 2002					
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NUMBER AND NAME						
RDT&E, N / BA-6			0604258N Target Systems Development (TSD)			A0609 Aerial Target Systems Development						
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 01 Cost	FY 01 Award Date	FY 02 Cost	FY 02 Award Date	FY 03 Cost	FY 03 Award Date	Cost to Complete	Total Cost	Target Value of Contract
SSAT	C/CPIF	Northrup-Grumman	16.210	2.505	Feb-01	14.162	Feb-02	16.190	Feb-03	8.353	57.420	57.420
SSST (Follow-On)	SS/CPIF	Orbital Sciences Corp., Chandler, AZ.	18.135	7.710	Feb-01	9.697	Dec-01	3.067	Dec-02	2.089	40.698	40.698
SSST (Precision Guidance) 1)	CPFF	McDonnell Douglas Corp., St. Louis, MO.	4.389	1.366	Jul-01						5.755	5.755
Miscellaneous Contracts	Various	Various	27.586	2.128	Various	3.761	Various	2.769	Various	Continuing	Continuing	
Miscellaneous (NAWC/Other)	WXs	Various	49.075	3.456	Various	3.727	Various	3.560	Various	Continuing	Continuing	
Subtotal Product Development			115.395	17.165		31.347		25.586		Continuing	Continuing	
Miscellaneous (HQ/NAWC)	Various	Various	1.232	0.461	Various	0.367	Various	0.273	Various	Continuing	Continuing	
Subtotal Support			1.232	0.461		0.367		0.273		Continuing	Continuing	
Remarks:												

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CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 2)										DATE: February 2002		
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6			PROGRAM ELEMENT 0604258N Target Systems Development (TSD)			PROJECT NUMBER AND NAME A0609 Aerial Targets Systems Development						
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 01 Cost	FY 01 Award Date	FY 02 Cost	FY 02 Award Date	FY 03 Cost	FY 03 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Miscellaneous (NAWCs)	Various	Various	8.382	1.829	Various	2.245	Various	1.915	Various	Continuing	Continuing	
Subtotal T&E			8.382	1.829		2.245		1.915		Continuing	Continuing	
Remarks:												
Miscellaneous (HQ/NAWCs)	Various	Various	5.764	1.242	Various	1.364	Various	1.568	Various	Continuing	Continuing	
SBIR Assessment						1.103					1.103	
Subtotal Management			5.764	1.242		2.467		1.568		Continuing	Continuing	
Remarks:												
Total Cost			130.773	20.697		36.426		29.342		Continuing	Continuing	
Remarks:												

R-1 SHOPPING LIST - Item No. 151

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Exhibit R-3, Project Cost Analysis
(Exhibit R-3, page 11 of 16)

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CLASSIFICATION: UNCLASSIFIED

EXHIBIT R-2a, RDT&E Project Justification							DATE: February 2002			
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6		PROGRAM ELEMENT NUMBER AND NAME 0604258N Target Systems Development (TSD)				PROJECT NUMBER AND NAME A0610 Weapon Systems T&E Development/Procurement				
COST (\$ in Millions)	Prior Year Cost	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	Cost to Complete	Total Program
Project Cost		9.667	11.508	12.099	12.100	15.595	30.143	31.166	Continuing	Continuing
RDT&E Articles Qty		2	3	3	3	3	3	3		

(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: This project provides for the development and procurement of aerial targets used solely for test and evaluation of Naval Weapons Systems which closely replicate current and projected threats to fleet units in the Joint Strike and the Littoral Warfare environments. This replication must include characteristics related to size, performance envelope, and electromagnetic and infrared signatures. As threats change, changes must be made to keep the targets as threat representative as possible. This is done in response to changes in the requirements of the developers of naval weapons.

(U) B. PROGRAM ACCOMPLISHMENTS AND PLANS:

1. FY 2001 Accomplishments:

-(U)	\$7.978	Continued program, engineering and logistic support for the FSAT, including Aviation Depot Level Repairables (AVDLR), procurement of kit material and conversion of two F-4S aircraft into FSAT targets.
-(U)	\$0.945	Continued T & E TA/AS Vector Scoring development/procurement/support.
-(U)	\$0.362	Continued VANDAL support.
-(U)	\$0.382	Continued Target Support.

2. FY 2002 PLANS:

-(U)	\$8.387	Continue program, engineering and logistic support for the FSAT, including Aviation Depot Level Repairables (AVDLR), procurement of kit material and conversion of three F-4S aircraft into FSAT targets.
-(U)	\$2.173	Continue T & E TA/AS Vector Scoring development/procurement/support.
-(U)	\$0.352	Continue VANDAL support.
-(U)	\$0.248	Continue Target Support .
-(U)	\$0.348	Portion of extramural program reserved for Small Business Innovation Research Assessment in accordance with 15USC 68

3. FY 2003 PLANS:

-(U)	\$8.897	Continue program, engineering and logistic support for the FSAT, including Aviation Depot Level Repairables (AVDLR), procurement of kit material and conversion of three F-4S aircraft into FSAT targets. Also includes initial support for follow-on FSAT development.
-(U)	\$2.977	Continue T & E TA/AS Vector Scoring development/procurement/support.
-(U)	\$0.225	Continue VANDAL support.

Note: Continued Target Support repread to other Weapon Systems T&E Development/Procurement programs.

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Exhibit R-2a, RDTEN Project Justification
(Exhibit R-2a, page 12 of 16)

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2002																
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6	PROGRAM ELEMENT NUMBER AND NAME 0604258N Target Systems Development (TSD)	PROJECT NUMBER AND NAME A0610 Weapon Systems T&E Development/Procurement																
<p>(U) C. PROGRAM CHANGE SUMMARY:</p> <table><thead><tr><th></th><th><u>FY2001</u></th><th><u>FY2002</u></th><th><u>FY2003</u></th></tr></thead><tbody><tr><td>(U) FY 2002 President's Budget:</td><td>9.787</td><td>11.611</td><td></td></tr><tr><td>(U) Adjustments from the President's Budget:</td><td>-0.120</td><td>-0.103</td><td></td></tr><tr><td>(U) FY 2003 Presidents Budget:</td><td>9.667</td><td>11.508</td><td>12.099</td></tr></tbody></table> <p>(U) D. CHANGE SUMMARY EXPLANATION:</p> <p>(U) Funding: The FY2001 decrease of \$0.120 million consists of \$0.087 million for Small Business Innovation Research Assessment and a \$0.033 million decrease for reprioritization of requirements within the Navy. The FY2002 decrease of \$0.103 million is for an undistributed congressional reductions.</p> <p>(U) Schedule: Not applicable.</p> <p>(U) Technical: Not applicable.</p>				<u>FY2001</u>	<u>FY2002</u>	<u>FY2003</u>	(U) FY 2002 President's Budget:	9.787	11.611		(U) Adjustments from the President's Budget:	-0.120	-0.103		(U) FY 2003 Presidents Budget:	9.667	11.508	12.099
	<u>FY2001</u>	<u>FY2002</u>	<u>FY2003</u>															
(U) FY 2002 President's Budget:	9.787	11.611																
(U) Adjustments from the President's Budget:	-0.120	-0.103																
(U) FY 2003 Presidents Budget:	9.667	11.508	12.099															

R-1 SHOPPING LIST - Item No. 151

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Exhibit R-2a, RDTEN Project Justification
(Exhibit R-2a, page 13 of 16)

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2002
APPROPRIATION/BUDGET ACTIVITY RDT&E, N BA-6	PROGRAM ELEMENT NUMBER AND NAME 0604258N Target Systems Development (TSD)	PROJECT NUMBER AND NAME A0610 Weapon Systems T&E Development/Procurement
<p>(U) E. OTHER PROGRAM FUNDING SUMMARY: Not applicable.</p> <p>Related RDT&E (U) P.E. 0207161N (Tactical Air Intercept) (U) P.E. 0207163N (Advanced Medium Range Air-to-Air Missile)</p> <p>(U) F. ACQUISITION STRATEGY: This is a non-ACAT program with no specific acquisition strategies.</p> <p>(U) G. SCHEDULE PROFILE: Not required</p>		

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CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 1)										DATE: February 2002		
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NUMBER AND NAME						
RDT&E, N / BA-6			0604258N Target Systems Development (TSD)			A0610 Weapons Systems T & E Development/Procurement						
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 01 Cost	FY 01 Award Date	FY 02 Cost	FY 02 Award Date	FY 03 Cost	FY 03 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Vector Scorer Development	SS/FFP	Aeronautical Systems Center	0.972	0.850	07/01	1.728	07/02	1.646	07/03	7.062	12.258	12.258
		Eglin AFB,FL										
Miscellaneous contracts	Various	Various	23.640	0.361	Various	0.373	Various	0.360	Various	Continuing	Continuing	
Miscellaneous (NAWC/NADEP)	WXs	Various	83.192	8.040	Various	8.438	Various	9.197	Various	Continuing	Continuing	
Subtotal Product Development			107.804	9.251		10.539		11.203		Continuing	Continuing	
Remarks:												
Miscellaneous(HQ/NAWC/NADEP)	Various	Various	4.642	0.305	Various	0.389	Various	0.600	Various	Continuing	Continuing	
Subtotal Support			4.642	0.305		0.389		0.600		Continuing	Continuing	
Remarks:												

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CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 2)							DATE: February 2002					
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NUMBER AND NAME						
RDT&E, N / BA-6			0604258N Target Systems Development (TSD)			A0610 Weapon Systems T&E Development/Procurement						
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 01 Cost	FY 01 Award Date	FY 02 Cost	FY 02 Award Date	FY 03 Cost	FY 03 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Subtotal T&E												
Remarks:												
Miscellaneous (HQ/NAWC/NADEP)	Various	Various	2.352	0.111	Various	0.232	Various	0.296	Various	Continuing	Continuing	
SBIR Assessment						0.348					0.348	
Subtotal Management			2.352	0.111		0.580		0.296		Continuing	Continuing	
Remarks:												
Total Cost			114.798	9.667		11.508		12.099		Continuing	Continuing	
Remarks:												

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CLASSIFICATION:

EXHIBIT R-2, RDT&E Budget Item Justification								DATE: February 2002			
APPROPRIATION/BUDGET ACTIVITY RESEARCH DEVELOPMENT TEST & EVALUATION, NAVY / BA-6						R-1 ITEM NOMENCLATURE 0604759N Major T & E Investment					
COST (\$ in Millions)	Prior Years Cost		FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	Cost to Complete	Total Program
Total PE Cost			43.838	44.111	42.453	45.777	47.969	47.888	47.904	Continuing	Continuing
W2195 Test and Evaluation Investment			43.838	41.435	42.453	45.777	47.969	47.888	47.904	Continuing	Continuing
W9091 T&E Range & Airborne Telemetry				1.685							1.685
W9092 Flight Operations Safety at Pax River				0.991							0.991
Quantity of RDT&E Articles	Not Applicable										
*The FY 2001 budget reflects Congressional Adds for T&E Support for the Fleet Air Training (\$2.000 million) which was reduced by \$.018 million and the Acquisition/Installation of Refurbished SPS-48E Radar Systems (\$3.000 million) reduced by \$.027 million respectively for Congressional reductions.											
(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: This project improves visibility of Test and Evaluation (T&E) resources across the Services for Major T&E investment funding. These funds correct major deficiencies, improve T&E capabilities, and increase T&E support effectiveness. The T&E Investment project provides support for the Naval Undersea Warfare Center Detachment Atlantic Undersea Test and Evaluation Center (NAVUNSEAWARCEN DET AUTEC), Andros Island, Bahamas; the Naval Air Warfare Center Weapons Division (NAVAIRWARCENWPNDIV), Point Mugu, CA and China Lake, CA; and Naval Air Warfare Center Aircraft Division (NAVAIRWARCENACDIV), Patuxent River, MD.											
(U) JUSTIFICATION FOR BUDGET ACTIVITY: This program is funded under RDT&E MANAGEMENT SUPPORT because it supports the operations and installations required for general research and development use.											

R-1 SHOPPING LIST - Item No. 152

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Exhibit R-2, RDTEN Budget Item Justification
(Exhibit R-2, page 1 of 12)

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification								DATE:				
								February 2002				
APPROPRIATION/BUDGET ACTIVITY		PROGRAM ELEMENT NUMBER AND NAME				PROJECT NUMBER AND NAME						
RDT&E, N / BA: 6		0604759N Major T&E Investment				W2195 T&E Investment						
COST (\$ in Millions)		Prior Years Cost		FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	Cost to Complete	Total Program
Project Cost				43.838*	41.435	42.453	45.777	47.969	47.888	47.904	Continuing	Continuing
RDT&E Articles Qty												
*The FY 2001 budget reflects Congressional Adds for T&E Support for the Fleet Air Training (\$2.000 million) which was reduced by \$.018 million and the Acquisition/Installation of Refurbished SPS-48E Radar Systems (\$3.000 million) reduced by \$.027 million respectively for Congressional reductions.												
(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: This project improves visibility of Test and Evaluation (T&E) resources across the Service for Major T&E investment funding. These funds correct major deficiencies, improve T&E capabilities, and increase T&E support effectiveness. The T&E Investment project provides support for the Naval Undersea Warfare Center Detachment Atlantic Undersea Test and Evaluation Center (NAVUNSEAWARCEN DET AUTECH), Andros Island, Bahamas; the Naval Air Warfare Center Weapons Division (NAVAIRWARCENWPNDIV), Point MUGU, CA and China Lake, CA; and the Naval Air Warfare Center Aircraft Division (NAVAIRWARCENACDIV), Patuxent River, MD.												
(U) PROGRAM ACCOMPLISHMENTS AND PLANS:												
1. FY 2001 ACCOMPLISHMENTS:												
- (U) (\$4.796) NAVUNSEAWARCEN DET AUTECH. Completed Tracking Hydrophone Replacement Project. Continued Instrumentation Component Replacements (ICR) efforts. Continued Radar Systems Improvement efforts. Continued the Off-Board Advanced Systems Stimulator Project (OASYS). Continued the Underwater Range Data Communication Project.												
- (U) (\$13.965) NAVAIRWARCENWPNSDIV. Continued to modernize core instrumentation capability. Completed high rate telemetry data acquisition and processing upgrades from one to four 20Mb/s data streams at the Sea Range. Continued the upgrade of two metric radar (3 and 4 of 7) electronic systems and control consoles and add moving target indicators, automatic calibration and computer controls of chart recorders at San Nicolas Island. Continued the Integrated Target Control System Keep Alive Project. Continued modernization of air traffic control radar processing systems, controller consoles and voice switches to systems that will be compatible with the Federal Aviation Administration (FAA) and non-Major Range Test and Facility Base (MRTFB) Department of Defense (DoD) air control network. Continued modernizing deteriorated copper cables providing data, video and communications within the Sea Range complex. Continued a project to assemble and field remote, fixed and mobile telemetry receiving stations to provide full land range coverage required by customers. Continued Kineto tracking mounts with video tracker, Infrared (IR) cameras and telescopes, and microwave transmission capability. Continued replacement of obsolete GPS receivers and operating software. Completed Air Reconnaissance Search Radar (ARSR-3) radar integration at San Nicholas Island. Completed Environmental Impact Studies at China Lake and Point Mugu.												
- (U) (\$3.100) Completed Network Centric Warfare (NCW) Implementation. Completed the consolidated Test and Evaluation effort on behalf of NAVAIRWARCENWPNSDIV and NAVAIRWARCENACDIV that refocuses investments towards interconnection of existing facilities. Completed the establishment of an enterprise federation of interconnected facilities that will utilize a common scheduling tool, interoperable models and a common network. Completed integration Research, Development, Test and Evaluation facilities to optimize support for air combat systems integration into future joint warfare systems. Completed using existing communications infrastructure Defense Research Engineering Network and Defense Information Systems Network. Completed the procurement of hardware and software to improve facility connectivity, establish software capabilities such as Distributed Interactive Simulation and High Level Architecture to support interoperability testing, and develop needed collaborative tools to operate the federation.												

R-1 SHOPPING LIST - Item No. 152

Exhibit R-2a, RDTE Project Justification
(Exhibit R-2a, page 2 of 12)

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2002
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6	PROGRAM ELEMENT NUMBER AND NAME 0604759N Major T&E Investment	PROJECT NUMBER AND NAME W2195 T&E Investment
<p>1. FY 2001 ACCOMPLISHMENTS: (continued)</p> <p>- (U) (\$14.922) NAVAIRWARCENACDIV. Continued to modernize core instrumentation capability. Continued to modernize RIR-778 Range Instrumentation radars and the Multiple Target Instrumentation Radar. Continued to replace aging Telemetry acquisition and processing equipment. Continued to replace and upgrade obsolescent image generators and video display systems at the Manned Flight Simulator facility. Continued to develop full-spectrum dynamic avionics and aircraft signature measurement system. Continued procurement of Common Avionics Instrumentation System (CAIS) hardware suites. Completed correction of deficiencies in the tactical electronic warfare simulators. Completed radio frequency to fiber optic interface project. Completed fiber optic connectivity between multiple sites and range facilities.</p> <p>- (U) (\$2.100) Joint Modeling and Simulation System (JMASS). Continued efforts to develop a tri-service simulation infrastructure that will assist model developers, engineers, and analysts in the development of digital models, configuration and execution of simulations and analysis of simulation capabilities.</p> <p>- (U) (\$1.982) Fleet Air Training. Congress appropriated \$2M to augment and enhance the test and evaluation resources and capabilities (video scoring, laser evaluation, mobile command and control communications , portable emitters) of the Atlantic Test Range to support naval fleet aviation readiness training.</p> <p>- (U) (\$2.973) Acquisition/Install SPS-48E. Congress appropriated \$3M to fund the acquisition and installation of a fleet-standard AN/SPS-48E shipboard air surveillance radar in support of the Airspace Management System at Naval Air Station (NAS) Patuxent River.</p>		

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Exhibit R-2a, RDTEN Project Justification
(Exhibit R-2a, page 3 of 12)

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2002
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6	PROGRAM ELEMENT NUMBER AND NAME 0604759N Major T&E Investment	PROJECT NUMBER AND NAME W2195 T&E Investment

2. FY 2002 PLANS:

- (U) (\$8.790) NAVUNSEAWARCEN DET AUTC. Continue Instrumentation Component Replacement (ICR) efforts. Continue Radar Systems Improvement efforts. Continue the Off-Board Advanced Systems Stimulator Project. Continue the Underwater Range Data Communications Project. Initiate Range Ware Improvement Project.
- (U) (\$16.497) NAVAIRWARCENWPNSDIV. Continue to modernize core instrumentation capability. Complete the upgrade of two metric radar (3 and 4 of 7) electronic systems and control consoles and add moving target indicators, automatic calibration and computer controls of chart recorders at San Nicolas Island. Complete the Integrated Target Control System Keep Alive project. Continue modernization of air traffic control radar processing systems, controller consoles and voice switches to systems that will be compatible with the Federal Aviation Administration (FAA) and non-Major Range Test and Facility Base (MRTFB) Department of Defense (DoD) air control network. Complete modernizing deteriorated copper cables proving data, video and communications within the Sea Range complexes. Continue a project to assemble and field remote, fixed and mobile telemetry receiving stations to provide full land range coverage required by customers. Complete Kineto tracking mounts with video tracker, Infrared (IR) cameras and telescopes, and microwave transmission capability. Complete replacement of obsolete GPS receivers and operating software. Initiate and complete upgrade of the site Command Transmitter System equipment. Develop a capability to test and evaluate effects and performance of hypersonic penetrators. Initiate replacement of aging cinesextant mount laser trackers with laser tracker kits. Initiate replacement of aging remote van equipment, vintage tracking antennas and allow multiple participant operations coverage at San Nicolas Island. Modernize frequency monitoring capabilities at Electronic Combat Range, Land Range, and Sea Range. Initiate replacement of obsolete data acquisition and electronic equipment at Skytop facility. Initiate moving target launch capability/instrumentation from C130A to C130F.
- (U) (\$12.794) NAVAIRWARCENACDIV. Continue to modernize core instrumentation capability. Complete modernization of RIR-778 Range Instrumentation radars and the Multiple Target Instrumentation Radar. Continue to replace aging Telemetry acquisition and processing equipment. Continue to replace and upgrade obsolescent image generators and video display systems at the Manned Flight Simulator facility. Continue to develop full-spectrum dynamic avionics and aircraft signature measurement system. Complete procurement of Common Airborne Instrumentation System (CAIS) hardware suites. Initiate replacement of obsolete data collection system with new collection and distribution system. Initiate and complete increased fuel filtration testing capabilities. Modernize the Range Control Center display systems. Initiate procurement of hardware to monitor radio frequency (RF) environment and responses in real-time for installed test facility. Integrate and support replacement of high-speed film cameras with Airborne Separation Video System. Initiate replacement of analog National Television Systems Committee (NTSC) video with digital systems based on industry and Advanced Television Systems Committee formats. Initiate upgrade mechanical/machining capabilities.
- (U) (\$2.100) Joint Modeling and Simulation System (JMASS). Continue efforts to develop a tri-service simulation infrastructure that will assist model developers, engineers, and analysis in the development of digital models, configuration and execution of simulations and analysis of simulation capabilities.
- (U) (\$1.254) Portion of extramural program reserved for Small Business Innovation Research (SBIR) assessment accordance with 15 USC 638.

R-1 SHOPPING LIST - Item No. 152

UNCLASSIFIED

Exhibit R-2a, RDTEN Project Justification
(Exhibit R-2a, page 4 of 12)

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2002
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6	PROGRAM ELEMENT NUMBER AND NAME 0604759N Major T&E Investment	PROJECT NUMBER AND NAME W2195 T&E Investment
<p>3. FY 2003 PLANS:</p> <p>- (U) (\$7.830) NAVUNSEAWARCEN DET AUTC. Continue Instrumentation Component Replacement (ICR) efforts. Continue Radar Systems Improvement efforts. Continue the Off-Board Advanced Systems Stimulator Project. Continue the Underwater Range Data Communications Project. Continue Range Ware Improvement Project.</p> <p>- (U) (\$20.302) NAVAIRWARCENWPNSDIV. Continue to modernize core instrumentation capability. Continue modernization of air traffic control radar processing systems, controller consoles and voice switches to systems that will be compatible with the Federal Aviation Administration (FAA) and non-Major Range Test and Facility Base (MRTFB) Department of Defense (DoD) air control network. Complete a project to assemble and field remote, fixed and mobile telemetry receiving stations to provide full land range coverage required by customers. Continue development of capability to test and evaluate effects and performance of hypersonic penetrators. Complete replacement of aging cinesextant mount laser trackers with laser tracker kits. Continue replacement of aging remote van equipment, vintage tracking antennas and allow multiple participant operations coverage at San Nicolas Island. Continue to modernize frequency monitoring capabilities at Electronic Combat Range, Land Range, and Sea Range. Continue replacement of obsolete data acquisition and electronic equipment at Skytop facility. Continue moving target launch capability/instrumentation from C130A to C130F. Initiate upgrade of metric radars (5 & 6) electronic systems and control consoles and add moving target indicators, automatic calibration and computer controls of chart recorders at San Nicolas Island. Initiate P-3 Instrumentation Replacement Project. Provide equipment support of the Advanced Range Telemetry Program (ARTM). Initiate upgrade Range's need to gather, distribute, record/store and perform post test data analysis with Digital Video.</p> <p>- (U) (\$12.921) NAVAIRWARCENACDIV. Continue to modernize core instrumentation capability. Complete replacement of aging Telemetry acquisition and processing equipment. Complete replacement and upgrade of obsolescent image generators and video display systems at the Manned Flight Simulator facility. Complete development of full-spectrum dynamic avionics and aircraft signature measurement system. Continue to replace obsolete data collection system with new collection and distribution system. Complete modernization of the Range Control Center display systems. Continue procurement of hardware to monitor radio frequency (RF) environment and responses in real-time for installed test facility. Complete integration and support replacement of high-speed film cameras with Airborne Separation Video System. Complete replacement of analog National Television Systems Committee (NTSC) video with digital systems based on industry and Advanced Television Systems Committee formats. Initiate upgrade universal radar moving target transponder to support all Navy radar systems. Continue to upgrade mechanical/machining capabilities. Initiate a development of a High Cycle Fatigue (HCF) Test Capability. Initiate upgrade for semi-automatic and video reader capabilities under the Next Generation Video Project.</p> <p>- (U) (\$1.400) Joint Modeling and Simulation System (JMASS). Continue efforts to develop a tri-service simulation infrastructure that will assist model developers, engineers, and analysis in the development of digital models, configuration and execution of simulations and analysis of simulation capabilities.</p>		

R-1 SHOPPING LIST - Item No. 152

UNCLASSIFIED

Exhibit R-2a, RDTEN Project Justification
(Exhibit R-2a, page 5 of 12)

UNCLASSIFIED

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE:	
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME	
RDT&E, N / BA-6	0604759N Major T&E Investment	W2195 T&E Investment	
(U) B. PROGRAM CHANGE SUMMARY:			
	<u>FY2001</u>	<u>FY2002</u>	<u>FY2003</u>
(U) FY 2002 President's Budget:	45.227	41.804	
(U) Adjustments from the FY 2002 President's Budget:	-1.389	-0.369	
(U) FY 2003 President's Budget Submit:	43.838	41.435	42.453
CHANGE SUMMARY EXPLANATION:			
(U) Funding: FY2001 decrease of \$1.389 million consists of a \$1.342 million decrease for reprioritization of requirements within the Navy and a \$.047 million decrease for a Small Business Innovative Research (SBIR) Assessment. FY2002 decrease of \$.369 million reflects an undistributed congressional reduction.			
(U) Schedule: Not Applicable.			
(U) Technical: Not Applicable.			
(U) C. OTHER PROGRAM FUNDING SUMMARY: Not Applicable.			
<u>Related RDT&E</u>			
(U) PE 0605807F: Test and Evaluation (Air Force)			
(U) PE 0605864N: Test and Evaluation (Navy)			
(U) D. ACQUISITION STRATEGY: Not Applicable.			
(U) E. SCHEDULE PROFILE: Not Applicable.			

R-1 SHOPPING LIST - Item No. 152

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Exhibit R-2a, RDTEN Project Justification
(Exhibit R-2a, page 6 of 12)

UNCLASSIFIED

CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 1)								DATE: February 2002				
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NUMBER AND NAME						
RDT&E, N / BA-6			0604759N Major T&E Investment			W2195 T&E Investment						
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 01 Cost	FY 01 Award Date	FY 02 Cost	FY 02 Award Date	FY 03 Cost	FY 03 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Network Centric Warfare Implement	WX	NAWCWD, Point Mugu, CA	2.850	3.100	10/00						5.950	
Tracking Hydrophone Replacement	WX	AUTEC, Newport, RI	17.242	1.457	10/00						18.699	
Tracking Mounts	WX	NAWCWD, Point Mugu, CA	11.363	1.103	10/00						12.466	
Range Telemetry Systems	WX	NAWCWD, Point Mugu, CA	8.526	0.800	10/00						9.326	
Air Surveillance Radar	WX	NAWCWD, Point Mugu, CA	3.252	0.700	10/00						3.952	
Slep FPS-16 (3 & 4)	WX	NAWCWD, Point Mugu, CA	2.600	1.620	10/00	1.720	10/01				5.940	
Radar Systems Improvements	WX	AUTEC, Newport, RI	0.200	0.200	01/01	2.900	10/01	1.300	10/02	1.300	5.900	
CATS-Radars	WX	NAWCAD, Pax River, MD	1.100	0.400	10/00	1.225	10/01				2.725	
Test Monitoring and Processing	WX	NAWCAD, Pax River, MD	1.700	1.968	10/00	2.572	10/01	2.460	10/02	0.758	9.458	
Target Control System	WX	NAWCWD, Point Mugu, CA	1.278	0.535	10/00	0.725	10/01				2.538	
Off-Board Advanced Sys Stimulator	WX	AUTEC, Newport, RI	2.846	1.879	10/00	2.760	10/01	3.300	10/02	3.300	14.085	
Manned Flight Simulator Upgrades	WX	NAWCAD, Pax River, MD	0.800	3.815	10/00	1.166	10/01				5.781	
MRTFB Surveillance	WX	NAWCWD, Point Mugu, CA	0.160	0.740	10/00	1.240	10/01	2.600	10/02	6.000	10.740	
Dynamic Multi-spectral Avionics Measure	WX	NAWCAD, Pax River, MD	1.345	2.630	10/00	2.700	10/01	2.100	10/02	2.100	10.875	
CAIS Equipment	WX	NAWCAD, Pax River, MD	2.100	3.340	10/00	1.200	10/01				6.640	
Cable Plant Phase II	WX	NAWCWD, Point Mugu, CA	2.045	2.497	01/01	2.250	01/02				6.792	
Fiber Optic Network Connectivity	WX	NAWCAD, Pax River, MD	0.640	0.190	10/00						0.830	
ATEWES Generator Upgrade	WX	NAWCAD, Pax River, MD	0.686	0.804	10/00						1.490	
ARDS Receiver Upgrade	WX	NAWCWD, Point Mugu, CA	1.800	1.803	10/00	0.750	10/01				4.353	
RF to Fiber Transmission Interface	WX	NAWCAD, Pax River, MD	1.500	0.455	10/00						1.955	
Remote TM Stations	WX	NAWCWD, Point Mugu, CA	1.206	1.344	10/00	2.643	10/01	1.197	10/02	1.645	8.035	
Investment Items Less Than \$1M	WX	Various		4.653	10/00	6.222	10/01	4.468	10/02	Continuing	Continuing	
Underwater Range Data Comm	WX	AUTEC, Newport, RI	0.650	0.750	10/00	1.710	10/01	1.600	10/02	2.649	7.359	
JMASS	MP	USAF, WPAFB, OH	1.100	2.100	10/00	2.100	10/01	1.400	10/02		6.700	
Remarks:												

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Exhibit R-3, Project Cost Analysis
(Exhibit R-3, page 7 of 12)

UNCLASSIFIED

CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 1)							DATE: February 2002					
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NUMBER AND NAME						
RDT&E, N / BA-6			0604759N Major T&E Investment			W2195 T&E Investment						
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 01 Cost	FY 01 Award Date	FY 02 Cost	FY 02 Award Date	FY 03 Cost	FY 03 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Remote TM (SN)	WX	NAWCWD, Point Mugu, CA				1.119	1/02	1.190	10/02	0.410	2.719	
Real-Time RF Environment Monitor	WX	NAWCAD, Pax River, MD				0.800	1/02	1.200	10/02		2.000	
RangeWare Improvement	WX	AUTEC, Newport, RI				0.800	1/02	1.200	10/02	3.600	5.600	
T-Range Heater	WX	NAWCWD, Point Mugu, CA				1.079	1/02	1.731	10/02	1.069	3.879	
ASVS Integration and Support	WX	NAWCAD, Pax River, MD				0.200	1/02	1.000	10/02		1.200	
Digital Imaging/Video Systems	WX	NAWCAD, Pax River, MD				0.800	1/02	1.000	10/02	1.600	3.400	
Spectrum Monitoring	WX	NAWCWD, Point Mugu, CA				1.500	1/02	3.041	10/02	3.700	8.241	
Tactical Propulsion	WX	NAWCWD, Point Mugu, CA						2.300	10/02	2.000	4.300	
Fleet Air Training	WX	NAWCAD, Pax River, MD		1.982	1/01						1.982	
Acquisition/Install SPS-48E	WX	NAWCAD, Pax River, MD		2.973	1/01						2.973	
SLEP 5 & 6	WX	NAWCWD, Point Mugu, CA						2.000	1/03	3.300	5.300	
P-3 Replacement/Instrumentation	WX	NAWCWD, Point Mugu, CA						2.000	1/03	14.000	16.000	
Universal Radar Moving Target Tran	WX	NAWCAD, Pax River, MD						0.400	1/03	0.700	1.100	
Mechanical Solutions Enhancement	WX	NAWCAD, Pax River, MD						0.665	1/03	1.500	2.165	
Next Generation Video/Film Visualizat	WX	NAWCAD, Pax River, MD						0.500	1/03	1.000	1.500	
High Cycle Fatigue (HCF) Test Capa	WX	NAWCAD, Pax River, MD						1.582	1/03	1.100	2.682	
ARTM	WX	NAWCWD, Point Mugu, CA						1.325	1/03	0.533	1.858	
Digital Video Implementation	WX	NAWCWD, Point Mugu, CA						0.894	1/03	3.900	4.794	
SBIR ASSESSMENT						1.254				1.254	1.254	
Subtotal Product Development			66.989	43.838		41.435		42.453		Continuing	Continuing	
Remarks:												
Total Cost			66.989	43.838		41.435		42.453		Continuing	Continuing	
Remarks: There are no Support cost, T&E cost or Management Support costs.												

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Exhibit R-3, Project Cost Analysis
(Exhibit R-3, page 8 of 12)

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification									DATE: February 2002																		
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA: 6		PROGRAM ELEMENT NUMBER AND NAME 0604759N Major T&E Investment				PROJECT NUMBER AND NAME W9091 T&E Range & Airborne Telemetry																					
COST (\$ in Millions)	Prior Years Cost		FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	Cost to Complete	Total Program																
Project Cost				1.685							1.685																
RDT&E Articles Qty																											
<p>(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: This project provides improved airborne telemetry receiving instrumentation for use onboard NAWCWD current (P-3) and future (C130) range support airframes.</p> <p>(U) PROGRAM ACCOMPLISHMENTS AND PLANS:</p> <p>1. FY 2002 PLANS:</p> <p style="padding-left: 40px;">- (U) (\$1.685) Procure telemetry antenna, receiver, recorder, and processing equipment for use on NAWCWD's airborne telemetry aircraft.</p> <p>(U) B. PROGRAM CHANGE SUMMARY:</p> <table style="width: 100%; margin-top: 10px;"> <thead> <tr> <th></th> <th style="text-align: center;"><u>FY2001</u></th> <th style="text-align: center;"><u>FY2002</u></th> <th style="text-align: center;"><u>FY2003</u></th> </tr> </thead> <tbody> <tr> <td>(U) FY 2002 President's Budget:</td> <td></td> <td style="text-align: center;">0.000</td> <td></td> </tr> <tr> <td>(U) Adjustments from the FY 2002 President's Budget:</td> <td></td> <td style="text-align: center;">1.685</td> <td></td> </tr> <tr> <td>(U) FY 2003 President's Budget Submit:</td> <td></td> <td style="text-align: center;">1.685</td> <td></td> </tr> </tbody> </table> <p>CHANGE SUMMARY EXPLANATION:</p> <p style="padding-left: 40px;">(U) Funding: The FY 2002 increase is a Congressional Add for Test and Evaluation Range and Airborne Telemetry Systems Modernization. (U) Schedule: Not Applicable. (U) Technical: Not Applicable.</p> <p>(U) C. OTHER PROGRAM FUNDING SUMMARY:</p> <p style="padding-left: 40px;"><u>Related RDT&E</u> (U) PE 0605864N: Test and Evaluation (Navy)</p> <p>(U) D. ACQUISITION STRATEGY: Not Applicable. (U) E. SCHEDULE PROFILE: Not Applicable.</p>													<u>FY2001</u>	<u>FY2002</u>	<u>FY2003</u>	(U) FY 2002 President's Budget:		0.000		(U) Adjustments from the FY 2002 President's Budget:		1.685		(U) FY 2003 President's Budget Submit:		1.685	
	<u>FY2001</u>	<u>FY2002</u>	<u>FY2003</u>																								
(U) FY 2002 President's Budget:		0.000																									
(U) Adjustments from the FY 2002 President's Budget:		1.685																									
(U) FY 2003 President's Budget Submit:		1.685																									

R-1 SHOPPING LIST - Item No. 152

Exhibit R-2a, RDTEEN Project Justification
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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification									DATE: February 2002																		
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA: 6		PROGRAM ELEMENT NUMBER AND NAME 0604759N Major T&E Investment				PROJECT NUMBER AND NAME W9092 Flight Operations Safety at Pax River																					
COST (\$ in Millions)	Prior Years Cost		FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	Cost to Complete	Total Program																
Project Cost				0.991							0.991																
RDT&E Articles Qty																											
<p>(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: This project provides expansion of Identification, Friend or Foe (IFF) Multi-lateration Dependent Surveillance (MDS) System for Airspace Surveillance at Pax River. These sensors will increase aircraft position information coverage and increase accuracy of aircraft control.</p> <p>(U) PROGRAM ACCOMPLISHMENTS AND PLANS:</p> <p style="margin-left: 40px;">1. FY 2002 PLANS:</p> <p style="margin-left: 80px;">(U) (\$0.991) Procure additional IFF ground receiving stations and integrate/upgrade existing surveillance display systems.</p> <p>(U) B. PROGRAM CHANGE SUMMARY:</p> <table style="margin-left: 100px; border: none;"> <thead> <tr> <th></th> <th style="text-align: center;"><u>FY2001</u></th> <th style="text-align: center;"><u>FY2002</u></th> <th style="text-align: center;"><u>FY2003</u></th> </tr> </thead> <tbody> <tr> <td>(U) FY 2002 President's Budget:</td> <td></td> <td style="text-align: center;">0.000</td> <td></td> </tr> <tr> <td>(U) Adjustments from the FY 2002 President's Budget:</td> <td></td> <td style="text-align: center;">0.991</td> <td></td> </tr> <tr> <td>(U) FY 2003 President's Budget Submit:</td> <td></td> <td style="text-align: center;">0.991</td> <td></td> </tr> </tbody> </table> <p>CHANGE SUMMARY EXPLANATION:</p> <p style="margin-left: 40px;">(U) Funding: The FY 2002 increase is a Congressional Add for Flight Operation Safety at Patuxent River, Maryland.</p> <p style="margin-left: 40px;">(U) Schedule: Not Applicable.</p> <p style="margin-left: 40px;">(U) Technical: Not Applicable.</p> <p>(U) C. OTHER PROGRAM FUNDING SUMMARY:</p> <p style="margin-left: 40px;"><u>Related RDT&E</u></p> <p style="margin-left: 80px;">(U) PE 0605864N: Test and Evaluation (Navy)</p> <p>(U) D. ACQUISITION STRATEGY: Not Applicable.</p> <p>(U) E. SCHEDULE PROFILE: Not Applicable.</p>													<u>FY2001</u>	<u>FY2002</u>	<u>FY2003</u>	(U) FY 2002 President's Budget:		0.000		(U) Adjustments from the FY 2002 President's Budget:		0.991		(U) FY 2003 President's Budget Submit:		0.991	
	<u>FY2001</u>	<u>FY2002</u>	<u>FY2003</u>																								
(U) FY 2002 President's Budget:		0.000																									
(U) Adjustments from the FY 2002 President's Budget:		0.991																									
(U) FY 2003 President's Budget Submit:		0.991																									

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Exhibit R-2a, RDTEEN Project Justification
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Exhibit R-3, Project Cost Analysis
(Exhibit R-3, page 12 of 12)

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FY 2003 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET

DATE: FEBRUARY 2002

BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605152N

PROGRAM ELEMENT TITLE: Studies and Analysis Support, Navy

(U) COST: (Dollars in Thousands)

Project Number & Title	FY 2001 ACTUAL	FY 2002 ESTIMATE	FY 2003 ESTIMATE	FY 2004 ESTIMATE	FY 2005 ESTIMATE	FY 2006 ESTIMATE	FY 2007 ESTIMATE	TO COMPLETE	TOTAL PROGRAM
L2097 Manpower, Personnel, and Training	226	1,493	299	305	311	316	323	CONT.	CONT.
R0132 CNO Program Analysis and Evaluation	107	-	-	-	-	-	-	-	3,815
R0133 National Academy of Sciences/Naval Studies Board	2,023	1,464	1,605	2,119	2,191	2,237	2,285	CONT.	CONT.
R0147 Operational Strategic and Tactical Effectiveness Analysis	163	-	-	-	-	-	-	-	2,689
S2233 Naval Surface Warfare Studies	3,389	1,076	-	-	-	-	-	-	-
S2354 Expeditionary Warfare Studies	360	329	-	-	-	-	-	-	-
W2092 Naval Aviation Studies	2,001	1,564	2,167	2,164	1,813	1,841	1,870	CONT.	CONT.
TOTAL	8,269	5,926	4,071	4,588	4,315	4,394	4,478	CONT.	CONT.

(U) MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: This program provides analytical support to the Secretary of the Navy and the Chief of Naval Operations as a basis for major policy, planning and acquisition program execution decisions. It supports research and development strategy development and planning. It supports studies in the areas of manpower, personnel, training, and aviation. It also develops analytical tools for evaluating effectiveness of U.S. weapons against potential foreign threat ships and submarines.

(U) JUSTIFICATION FOR BUDGET ACTIVITY: This program is funded under RDT&E MANAGEMENT SUPPORT because it supports the operations and installations required for general research and development use.

(U) PROGRAM CHANGE FOR TOTAL PE:

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Budget Item Justification
(Exhibit R-2, Page 1 of 9)

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FY 2003 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET

DATE: FEBRUARY 2002

BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605152N

PROGRAM ELEMENT TITLE: Studies and Analysis Support, Navy

	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>
(U) FY 2002 President's Budget:	5,997	6,679	
(U) Adjustments from PRESBUDG:			
(U) SBIR Adjustment	-99		
(U) 2001 Execution Adjustments	+2,371		
(U) Section 8123 - Management Reform Initiative Reduction		-53	
(U) Congressional Reduction		-2,000	
(U) Technical Adjustment		1,300	
(U) FY 2003 President's Budget Submission:	8,269	5,926	4,071

(U) CHANGE SUMMARY EXPLANATION:

(U) Schedule: Not applicable.

(U) Technical: Not applicable.

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Budget Item Justification
(Exhibit R-2, Page 2 of 9)

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FY 2003 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET

DATE: FEBRUARY 2002

BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605152N

PROGRAM ELEMENT TITLE: Studies and Analysis Support, Navy

(U) COST: (Dollars in Thousands)

Project Number & Title	FY 2001 ACTUAL	FY 2002 ESTIMATE	FY 2003 ESTIMATE	FY 2004 ESTIMATE	FY 2005 ESTIMATE	FY 2006 ESTIMATE	FY 2007 ESTIMATE	TO COMPLETE	TOTAL PROGRAM
L2097 Manpower Personnel & Training	226	1,493	299	305	311	316	323	CONT.	CONT.

A. (U) MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: The Chief of Naval Personnel has a continuing need for studies and analyses of manpower and personnel (M&P) policies and programs and critical M&P issues that have Navy-wide implications. This project provides an essential management tool to: (a) assess the effectiveness of existing M&P policies and programs; (b) identify needs for new policies and programs; (c) determine the required manpower and training mix relative to changing demographic, societal and legislative/regulatory actions, and to evolving strategic and geopolitical factors; (d) study the impact of M&P programs on Navy accession, attrition, retention, and performance; and, to (e) develop, validate and/or refine a broad range of M&P forecasting models. The program permits Navy to more effectively utilize Research and Development expertise to respond to emergent M&P issues on a continuing basis.

(U) PROGRAM ACCOMPLISHMENTS AND PLANS:

1. (U) FY 2001 ACCOMPLISHMENTS:

- (U) (\$33) Developed a prototype tool/model for Enlisted Community Managers to project a target number for female accessions. The Navy Gender Specific Enlisted Accession Model provides a recommended aggregate accession number for women based on projected bunks at sea and female continuation rates.
- (U) (\$93) Completed an evaluation of the Navy Manning Plan for Officers (NMPO) Model. Recommended NMPO business improvements to Officer Distribution managers through a Business Process Reengineering study.
- (U) (\$65) Completed an evaluation of Navy Counseling & Advocacy Programs to understand how these programs, in absence of any consistent parameters, meet their primary objectives and positively affect outcomes such as personal readiness and retention.
- (U) (\$35) Completed the first phase of a two year General Educational Development (GED) Screening Pilot Study to assess 1st term Attrition of Non-High School Diploma Graduates. Made arrangements for study participation with the American Council on Education and with several states with large numbers of GED certificate holders. Developed and pre-tested a thorough biographical questionnaire and prepared detailed guidelines for administration of the questionnaire at the Military Entrance Processing Stations (MEPS).

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Budget Item Justification
(Exhibit R-2, Page 3 of 9)

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FY 2003 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET

DATE: FEBRUARY 2002

BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605152N

PROJECT NUMBER: L2097

PROGRAM ELEMENT TITLE: Studies and Analysis
Support, Navy

PROJECT TITLE: Manpower, Personnel,
and Training

2. (U) FY 2002 PLAN:

- (U) (\$64) Complete GED Screening Pilot Study begun in FY 2001. Collect and analyze information and data obtained from state GED files and from completed questionnaires at the MEPS. Identify and evaluate procedures to broaden recruiting base and to reduce 1st term Attrition.
- (U) (\$74) Conduct Retention Goaling by Rating and Paygrade study to thoroughly analyze methods of developing a system to generate a sustainable force structure for each enlisted skill/community in the Navy. This system would provide the length of service targets for a future system to determine specific accession and retention goals for personnel in each Navy skill.
- (U) (\$55) Conduct a Business Process Reengineering (BPR) Conceptual Modeling study to develop a Web-based prototype tool to support rapid generation and analysis of alternative redesign process models, along with the associated documentation.
- (U) (\$1,300) Outyear funding will be contained in PE 0605013N, Project 62907.

3. (U) FY 2003 PLAN:

- (U) (\$40) Conduct a cost-benefit analysis of Recruiter Refresher Training.
- (U) (\$86) Assess possibility of Training "A"-school Concepts to Recruits in Delayed Entry Program (DEP).
- (U) (\$108) Study the effectiveness of various pay/bonuses to reduce attrition and to improve retention.
- (U) (\$65) Assess the value of Morale, Welfare, and Recreation Program investments on Sailor retention.

B. (U) PROGRAM CHANGE SUMMARY: See Program Change For PE

C. (U) OTHER PROGRAM FUNDING SUMMARY: Not applicable.

D. (U) SCHEDULE PROFILE: Not applicable.

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Budget Item Justification
(Exhibit R-2, Page 4 of 9)

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FY 2003 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET

DATE: FEBRUARY 2002

BUDGET ACTIVITY: 6 PROGRAM ELEMENT: 0605152N PROJECT NUMBER: R0133
PROGRAM ELEMENT TITLE: Studies and Analysis PROJECT TITLE: National Academy of Science/
Support, Navy Naval Studies Board

(U) COST: (Dollars in Thousands)

Project Number & Title	FY 2001 ACTUAL	FY 2002 ESTIMATE	FY 2003 ESTIMATE	FY 2004 ESTIMATE	FY 2005 ESTIMATE	FY 2006 ESTIMATE	FY 2007 ESTIMATE	TO COMPLETE	TOTAL PROGRAM
R0133 National Academy of Science/Naval Studies Board	2,023	1,464	1,605	2,119	2,191	2,237	2,285	CONT.	CONT.

(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: This project supports the core program for the Naval Studies Board. As agreed upon between the Chief of Naval Operations (CNO) and the President of the National Academy of Sciences and with appropriate attention to the influence of the domestic economy, national objectives, social imperatives and anticipated military requirement, the Naval Studies Board will conduct and report upon surveys, investigations, and analyses in the field of scientific research and development applicable to the operation and function of the Navy. Reports consist of a briefing to the Assistant Secretary of the Navy (Research Development and Acquisition) (ASN (RD&A)) and the CNO and staff, and written technical reports.

(U) PROGRAM ACCOMPLISHMENTS AND PLANS:

1. (U) FY 2001 ACCOMPLISHMENTS:

- (U) (\$800) Continued research efforts and investigations in areas of interest to the Navy. Continued to support annual Navy authorized activities of importance, such as the National Space Forum and the Weinblum Memorial Lecture Series.
- (U) (\$1,223) Produced investigations of significant importance to the Navy concerning technology of the future, selected from proposals received from CNO and ASN (RD&A). Specifically, two studies were concluded, one on Theater Missile Defense and one on Mine Warfare. Additionally, one new study on chemical/biological warfare was started.

2. (U) FY 2002 PLAN:

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BUDGET ACTIVITY: 6 PROGRAM ELEMENT: 0605152N PROJECT NUMBER: R0133
PROGRAM ELEMENT TITLE: Studies and Analysis PROJECT TITLE: National Academy of Science/
Support, Navy Naval Studies Board

- (U) (\$800) Continue research efforts and investigations in areas of interest to the Navy. Continue to support annual Navy authorized activities of importance, such as the National Space Forum and the Weinblum Memorial Lecture Series.

- (U) (\$664) Produce investigations of significant importance to the Navy concerning technology of the future, selected from proposals received from CNO and ASN (RD&A). Two new studies have been authorized by CNO. The two studies will commence in early winter 2002. The new study titles are: The Role of Experimentation in Building Naval Forces, and Uninhabited Vehicles in support of Naval Forces.

3. (U) FY 2003 PLAN:

- (U) (\$850) Continue research efforts and investigations in areas of interest to the Navy. Continue to support annual Navy authorized activities of importance, such as the National Space Forum and the Weinblum Memorial Lecture Series.

- (U) (\$755) Continue performance on the two studies that were initiated in FY2002. Begin an additional 1-3 studies per the direction of the CNO sometime in early summer FY02.

B. (U) PROGRAM CHANGE SUMMARY: See Program Change Total for PE

C. (U) OTHER PROGRAM FUNDING SUMMARY: Not applicable.

D. (U) ACQUISITION STRATEGY: Not applicable.

E. (U) SCHEDULE PROFILE: Not applicable.

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BUDGET ACTIVITY: 6 PROGRAM ELEMENT: 0605152N
PROGRAM ELEMENT TITLE: Studies and Analysis
Support, Navy

(U) COST: (Dollars in Thousands)

Project Number & Title	FY 2001 ACTUAL	FY 2002 ESTIMATE	FY 2003 ESTIMATE	FY 2004 ESTIMATE	FY 2005 ESTIMATE	FY 2006 ESTIMATE	FY 2007 ESTIMATE	TO COMPLETE	TOTAL PROGRAM
W2092 Naval Aviation Studies	2,001	1,564	2,167	2,164	1,813	1,841	1,870	CONT.	CONT.

(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: This project supports studies over a wide range of naval aviation issues that support the ongoing Joint Strike Assessment (JSA) guidelines. Results provide a basis for recommendations to the Chief of Naval Operations concerning major policy, planning, and acquisition program decisions. This effort is a management initiative, which will allow allocation of study resources in a timely manner according to priorities. This ongoing program will continue to leverage more detailed program specific analysis in order to gain insight in acquisition of various weapon systems and their impact on force structure, manning levels, operational readiness and Carrier Air Wing (CVW) effectiveness. This program will also support various Analysis of Alternatives (AOA) Studies.

(U) PROGRAM ACCOMPLISHMENTS AND PLANS:

1. (U) FY 2001 ACCOMPLISHMENTS:

- (U) (\$250) Continued efforts to support operational analysis for network centric warfare.
- (U) (\$300) Continued studies to support JSA issues for the current and follow-on cycle.
- (U) (\$350) Developed techniques for analysis of naval aviation warfare requirements versus current system capabilities.
- (U) (\$300) Expanded the studies to evaluate future concepts for strike concepts of operations.

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BUDGET ACTIVITY: 6 PROGRAM ELEMENT: 0605152N PROJECT NUMBER: W2092
PROGRAM ELEMENT TITLE: Studies and Analysis PROJECT TITLE: Naval Aviation Studies
Support, Navy

- (U) (\$240) Continued the studies to investigate alternatives for advanced weapon initiatives.
- (U) (\$561) Provided support with general aviation related AOAs and studies with NAVAIR and OPNAV.

1. (U) FY 2002 PLAN:

- (U) (\$100) Continue a low level, multi-year effort to develop a consistent methodology to quantify and estimate future network centric warfare effectiveness.
- (U) (\$50) Continue studies to support JSA issues for POM-04.
- (U) (\$367) Resume limited Carrier Air Wing (CVW) capability analysis effort.
- (U) (\$291) Continue studies to evaluate concepts of operations for strike missions.
- (U) (\$300) Continue studies to explore alternatives for Advanced Weapons Initiatives.
- (U) (\$456) Provide support for general aviation related AOAs and studies within NAVAIR and OPNAV.

2. (U) FY 2003 PLAN:

- (U) (\$300) Continue a low level, multi-year effort to develop a consistent methodology to quantify and estimate future network centric warfare effectiveness.
- (U) (\$350) Continue studies to support JSA issues for current and follow on cycle.
- (U) (\$385) Continue to evaluate the integration of advanced technology into the Carrier Battle Group (CVBG).
- (U) (\$400) Continue studies to evaluate concepts of operations for strike missions.
- (U) (\$400) Continue studies to explore alternatives for advanced weapons initiatives.

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BUDGET ACTIVITY: 6 PROGRAM ELEMENT: 0605152N PROJECT NUMBER: W2092
PROGRAM ELEMENT TITLE: Studies and Analysis PROJECT TITLE: Naval Aviation Studies
Support, Navy

- (U) (\$332) Provide support for general aviation related AOAs and studies within NAVAIR and OPNAV.
- B. (U) PROGRAM CHANGE SUMMARY: See Program Change Total for PE
- C. (U) OTHER PROGRAM FUNDING SUMMARY: Not applicable
- D. (U) ACQUISITION STRATEGY: Not Applicable
- E. (U) SCHEDULE PROFILE: Not Applicable

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BUDGET ACTIVITY: 6 PROGRAM ELEMENT: 0605154N
PROGRAM ELEMENT TITLE: Center for Naval Analyses

(U) COST: (Dollars in Thousands)

PROJECT NUMBER & TITLE	FY 2001 ACTUAL	FY 2002 ESTIMATE	FY 2003 ESTIMATE	FY 2004 ESTIMATE	FY 2005 ESTIMATE	FY 2006 ESTIMATE	FY 2007 ESTIMATE	TO COMPLETE	TOTAL PROGRAM
C0031	4,231	4,158	4,556	4,803	4,892	3,043	4,014	CONT.	CONT.
R0148	39,072	38,533	40,879	41,548	43,122	43,984	44,866	CONT.	CONT.
TOTAL	43,303	42,691	45,435	46,351	48,014	47,027	48,880	CONT.	CONT.

(U) MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: The Center for Naval Analyses (CNA) is the Department of the Navy's only Federally Funded Research and Development Center. CNA provides independent, objective, and expert analyses based on its unique access to sensitive data and hands-on exposure to fleet operations gained through its world-wide field program. CNA's research program is centrally funded by this program element and is primarily concentrated along 1 Marine Corps category and 10 Navy categories of study called product areas. These product areas are structured to enhance CNA's focus of research and analysis upon the major present and future needs and issues of the Navy and the Marine Corps. Because of rapid advances in technology, changes in the fleet, the increasing complexity of weapon systems, and reductions in manpower, force structure, and budgets, the Navy and Marine Corps have a greater need for analyses that are both sophisticated and timely. CNA is highly qualified to meet that need.

(U) JUSTIFICATION FOR BUDGET ACTIVITY: This program is funded under RDT&E MANAGEMENT SUPPORT because it supports the operations and installations required for general research and development use.

(U) PROGRAM CHANGE SUMMARY:

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BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605154N

PROGRAM ELEMENT TITLE: Center for Naval Analyses

	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>
(U) FY 2002 President's Budget:	43,487	44,891	
Execution Adjustment	-184		
Section 8123 - Management Reform Initiative Reduction		-381	
FFRDC Reduction		-1,819	
(U) FY 2003 President's Budget Submission:	43,303	42,691	45,435

(U) CHANGE SUMMARY EXPLANATION:

(U) Schedule: Not applicable.

(U) Technical: Not applicable.

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BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605154N

PROGRAM ELEMENT TITLE: Center for Naval Analyses

(U) COST: (Dollars in Thousands)

PROJECT NUMBER & TITLE	FY 2001 ACTUAL	FY 2002 ESTIMATE	FY 2003 ESTIMATE	FY 2004 ESTIMATE	FY 2005 ESTIMATE	FY 2006 ESTIMATE	FY 2007 ESTIMATE	TO COMPLETE	TOTAL PROGRAM
C0031	Marine Corps Operations and Analysis Group (MCOAG)								
	4,231	4,158	4,556	4,803	4,892	3,043	4,014	CONT.	CONT.

A. (U) MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: This project supports the Marine Corps portion of the Department of the Navy's (DoNs) Center for Naval Analyses (CNA) Research Program. It is managed as an element of the Marine Corps Studies System. This program provides the Marine Corps with independent and objective research and analysis of specific issues/topics appropriately performed by a Federally Funded Research and Development Center (FFRDC). As a result of the findings and recommendations of the Fiscal Year 1997 Defense Science Board, the Marine Corps refocused the type of support CNA provides. The refocused effort maintains the number of field representatives for the Operational Forces commanders and established five specific areas of expertise for CNA to establish and maintain. The areas of expertise are (1) Logistics, (2) Manpower, (3) Programs and Resources, (4) Naval Integration, and (5) Operations. Scientific analyst support provides five full-time scientific analysts, one for each of the five focus areas. The program continues analytical support for field exercise, ad hoc, and quick response requirements.

(U) Justification for Budget Activity: This program is funded under RDT&E MANAGEMENT SUPPORT as it provides the USMC operations and installations the required analysis for research and development use.

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BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605154N

PROJECT NUMBER: C0031

PROGRAM ELEMENT TITLE: Center for Naval Analyses

PROJECT TITLE: Marine Corps Operations and
Analysis Group

(U) PROGRAM ACCOMPLISHMENTS AND PLANS:

1. (U) FY 2001 ACCOMPLISHMENTS:

- (U) (\$495) Continued maintenance of the LOGISTICS Area of Expertise including the funding of one scientific analyst. Executed high-priority logistics related study and analysis requirements included in the annual Marine Corps Studies Master Plan.
- (U) (\$400) Continued maintenance of the MANPOWER Area of Expertise including the funding of one scientific analyst. Executed high-priority force structure and personnel related study and analysis requirements included in the annual Marine Corps Studies Master Plan.
- (U) (\$401) Continued maintenance of the PROGRAMS and RESOURCES Area of Expertise including the funding of one scientific analyst. Executed high-priority Quadrennial Defense Review (QDR), program, resource, and readiness related study and analysis requirements included in the annual Marine Corps Studies Master Plan.
- (U) (\$469) Continued maintenance of the OPERATIONS Area of Expertise including providing analysts for field exercises and the funding of one scientific analyst. Executed high-priority Joint and Marine Air Ground Task Force (MAGTF) operations and Operational Maneuver from the Sea (OMFTS) implementation related study and analysis requirements included in the annual Marine Corps Studies Master Plan.
- (U) (\$545) Continued maintenance of the Naval Integration Area of Expertise including the funding of one scientific analyst. Executed high-priority QDR, Naval (From the Sea and OMFTS) and non-linearity aspects of combat related study and analysis requirements included in the annual Marine Corps Studies Master Plan.
- (U) (\$1,115) Funded the staffing of six Field Representative billets at COMMARFORPAC, COMMARFORLANT, CG I MEF, CG II MEF, MCAGCC, and CG III MEF.

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PROGRAM ELEMENT: 0605154N

PROJECT NUMBER: C0031

PROGRAM ELEMENT TITLE: Center for Naval Analyses

PROJECT TITLE: Marine Corps Operations and
Analysis Group

- (U) (\$806) Executed 5 to 8 "Quick Response" study projects (start to finish within 90 days); AD HOC support for the immediate analytical support requirements; and administrative support functions including: General Concept Development, CNA Self-Initiated Analysis Efforts, and Award Fee funding.

2. (U) FY 2002 PLAN:

- (U) (\$1,541) Provides formal study analysis and study support to operating forces and headquarters elements included in the annual Marine Corps Studies Master Plan.
- (U) (\$831) Continues scientific analyst support, within the six focus areas, to Marine Corps staff elements.
- (U) (\$621) Provides analysis support to operating forces exercises, AD HOC support for immediate analytical requirements, and other support functions including: General Concept Development, Quick Response, CNA Self-Initiated Analysis Efforts, administrative, and Award fee funding.
- (U) (\$1,165) Provides for six Field Representatives at COMMARFORPAC, COMMARFORLANT, CG I MEF, CG II MEF, CG III MEF, and MCMAGTFTC.

3. (U) FY 2003 PLAN:

- (U) (\$1,659) Provides formal study analysis and study support to operating forces and headquarters elements included in the annual Marine Corps Studies Master Plan.
- (U) (\$865) Continues scientific analyst support, within the six focus areas, to Marine Corps staff elements.
- (U) (\$1,351) Provides for Field Representatives at COMMARFORPAC, COMMARFORLANT, CG I MEF, CG II MEF, CG III MEF, and MCMAGTFTC.

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BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605154N

PROJECT NUMBER: C0031

PROGRAM ELEMENT TITLE: Center for Naval Analyses

PROJECT TITLE: Marine Corps Operations and
Analysis Group

- (U) (\$681) Supports analysis efforts with operating forces exercises, AD HOC support for the immediate analytical support requirements, and other support functions including: General Concept Development, Quick Response, CNA Self-Initiated Analysis Efforts, administrative, and Award fee funding.

B. (U) OTHER PROGRAM FUNDING SUMMARY: Not applicable.

(U) RELATED RDT&E:

(U) PE 0605873M (Marine Corps Program Wide Support)

C. (U) SCHEDULE PROFILE: Not applicable.

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BUDGET ACTIVITY: 6 PROGRAM ELEMENT: 0605154N
PROGRAM ELEMENT TITLE: Center for Naval Analyses

(U) COST: (Dollars in Thousands)

PROJECT NUMBER & TITLE	FY 2001 ACTUAL	FY 2002 ESTIMATE	FY 2003 ESTIMATE	FY 2004 ESTIMATE	FY 2005 ESTIMATE	FY 2006 ESTIMATE	FY 2007 ESTIMATE	TO COMPLETE	TOTAL PROGRAM
R0148	Center for Naval Analyses, Navy								
	39,072	38,533	40,879	41,548	43,122	43,984	44,866	CONT.	CONT.

A. (U) MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: This project supports the Navy's portion of the Center for Naval Analyses (CNA) Research Program, which is primarily concentrated along 10 Navy categories of study called product areas. These product areas include the following: 1) Manpower, Medical and Training; 2) Policy and Operations; 3) Infrastructure and Readiness; 4) Space and Electronic Warfare/Command, Control, Communications, and Computers/Intelligence and Information and Modeling and Simulation; 5) Systems and Force Structure; 6) Research, Development and Acquisition; 7) Systems and Tactics; 8) Field Program; 9) Scientific Analyst Program; and 10) Quick Response Projects. CNA's analyses have resulted in substantial improvements in force structure, fleet effectiveness, and significant cost avoidance.

(U) PROGRAM ACCOMPLISHMENTS AND PLANS:

1. (U) FY 2001 ACCOMPLISHMENTS:

- (U) (\$39,072) Addressed issues of major importance to Navy leadership in the above research areas. CNA's Research Program will be continually updated to support the Navy efficiently and effectively. Support for the CNA field program, which assigns analysts to over 33 locations around the world and at sea, continued to comprise approximately 20% of the funding.

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BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605154N

PROJECT NUMBER: R0148

PROGRAM ELEMENT TITLE: Center for Naval Analyses

PROJECT TITLE: Center for Naval Analysis,
Navy

2. (U) FY 2002 PLAN:

- (U) (\$38,533) Address issues of major importance to Navy leadership in the above research areas. CNA's Research Program will be continually updated to support the Navy efficiently and effectively. Support for the CNA field program, which assigns analysts to over 33 locations around the world and at sea, will continue to comprise approximately 20% of the funding.

3. (U) FY 2003 PLAN:

- (U) (\$40,879) Address issues of major importance to Navy leadership in the above research areas. CNA's Research Program will be continually updated to support the Navy efficiently and effectively. Support for the CNA field program, which assigns analysts to over 33 locations around the world and at sea, will continue to comprise approximately 20% of the funding.

B. (U) OTHER PROGRAM FUNDING SUMMARY: Not applicable.

(U) RELATED RDT&E:

(U) PE 0605152N (Studies and Analysis Support)

C. (U) SCHEDULE PROFILE: Not applicable.

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DATE: FEBRUARY 2002

BUDGET ACTIVITY: 6 PROGRAM ELEMENT: 0605155N
PROGRAM ELEMENT TITLE: Fleet Tactical Development and
Evaluation

(U) COST: (Dollars in thousands)

PROJECT NUMBER & TITLE	FY 2001 ACTUAL	FY 2002 ESTIMATE	FY 2003 ESTIMATE	FY 2004 ESTIMATE	FY 2005 ESTIMATE	FY 2006 ESTIMATE	FY 2007 ESTIMATE	TO COMPLETE	TOTAL PROGRAM
R0151	Intertype Tactical Development and Evaluation								
	2,675	2,886	2,771	2,646	2,905	2,953	3,008	CONT.	CONT.

A. (U) MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: This program element supports all naval warfare task areas and provides technical and analytical support to the fleet operating forces to develop and evaluate tactics for newly evolving force structures, new and existing weapon system employment, and changing threat scenarios to improve and measure force readiness.

(U) JUSTIFICATION FOR BUDGET ACTIVITY: This program is funded under RDT&E MANAGEMENT SUPPORT because it supports the operations and installations required for general research and development use.

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BUDGET ACTIVITY: 6	PROGRAM ELEMENT: 0605155N	PROJECT NUMBER: R0151
	PROGRAM ELEMENT TITLE: Fleet Tactical Development and Evaluation	PROJECT TITLE: Intertype Tactical Development and Evaluation

(U) PROGRAM ACCOMPLISHMENTS AND PLANS:

1. (U) FY 2001 ACCOMPLISHMENTS:

- (U) (\$32) Developed the Tactics, Techniques and Procedures (TTP) to effectively employ various assets to accomplish Time Critical Strike.
- (U) (\$90) Explored, analyzed, and constructed baseline standardization for Surface Combatant Commander/ Air Combatant Commander (SSC/ACC) Coordination.
- (U) (\$105) Developed the procedures to tactically employ selected ASW Tactical Decision Aids (TDAs) to fully support the planning, execution, and performance assessment of the Antisubmarine Warfare (ASW) search.
- (U) (\$125) Developed the TTP to negate the impact of single ship automated programmed chaff employment on the NATO Sea Sparrow missile system radar tracking of the threat.
- (U) (\$120) Developed a matrix for a number of foreign and US mines pertinent to current operations. The document included all mine parameters relevant to Mine Warfare (MIW) operations (dedicated and organic systems).
- (U) (\$112) Developed the TTP on the use of the Anti-Air Defense Commandeer module by an embarked staff.
- (U) (\$165) Established the TTP to effectively employ the Cooperative Engagement Capability within the Composite Warfare concept.
- (U) (\$90) Developed and evaluated a tactic for amphibious littoral air defense.

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DATE: FEBRUARY 2002

BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605155N

PROJECT NUMBER: R0151

PROGRAM ELEMENT TITLE: Fleet Tactical Development and
Evaluation

PROJECT TITLE: Intertype Tactical
Development and Evaluation

- (U) (\$275) Developed light weight torpedo (LWT) attack tactics which included target-specific weapons aimpoints and weapons presets. The project evaluated the Probability of Hit (Phit) for the MK-46 and MK-50 in order to optimize LWT selection, and determined the number of LWT required for this target.
- (U) (\$160) Analyzed lethality of Hellfire against this database of targets based on the aimpoints/impact point.
- (U) (\$90) Determined optimum sweep tactics for fields containing more than one mine type. These sweep tactics provide the optimum sweep current pulse cycle when sweeping more than one mine type.
- (U) (\$100) Developed TTP for a Sea Combat Commander fusion plot to optimize the employment of sensors and weapons.
- (U) (\$125) Developed a user-friendly Surface Warfare (SUW) surveillance planning aid to optimize asset effectiveness.
- (U) (\$100) Developed and validated tactics for employment of the E-2C+ radar in near and overland environments.
- (U) (\$225) Developed/refined tactical guidance for engaging quiet modern submarines in close encounter scenarios.
- (U) (\$105) Established TTP for incorporating USSPACECOM computer network defense support into Navy led operations.
- (U) (\$100) Refined existing multi-plane "extended echo ranging" tactics as a viable large area search tool.

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BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605155N

PROJECT NUMBER: R0151

PROGRAM ELEMENT TITLE: Fleet Tactical Development and
Evaluation

PROJECT TITLE: Intertype Tactical
Development and Evaluation

- (U) (\$70) Developed procedures to standardize the use of IT-21 capabilities used in support of the Force Over-the Horizon Targeting Coordinator (FOTC).
- (U) (\$205) Identified the techniques, procedures, manning, training, material and logistics requirements to conduct data link operations at sea in a Navy, naval, joint, allied or coalition environment.
- (U) (\$110) Evaluated the effects of weather, terrain and range on the utility of the cooperative interrogator transponder system.
- (U) (\$10) Created a CD-ROM Tactical Decision Aid for the Maritime Patrol Aircraft support of Carrier Battle Group operations.
- (U) (\$17) Created a CD-ROM Tactical Decision Aid to aid in the coordination between surface ships and Maritime Patrol Aircraft.
- (U) (\$87) Developed new/updated tactics for the escort of Combat Search and Rescue (CSAR) helicopters.
- (U) (\$57) Program Support.

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BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605155N

PROJECT NUMBER: R0151

PROGRAM ELEMENT TITLE: Fleet Tactical Development and
Evaluation

PROJECT TITLE: Intertype Tactical
Development and Evaluation

2. (U) FY 2002 PLAN:

- (U) (\$ 75) Develop TTP to employ the SIPRNET and associated IT21 equipment as a method for managing the FOTC Database.
- (U) (\$185) Develop TTP for protection of a High Value Unit (Carrier/Amphibious ship) with the NULKA self defense system.
- (U) (\$200) Develop a targeting process for attacking Time Critical Targets using emergent target mensuration systems.
- (U) (\$110) Develop TTP for defending against Small Boat Attacks using Swarm tactics with an Armed Helo.
- (U) (\$ 85) Develop TTP defining the effectiveness of EA-6B Jamming on Anti-Ship Missiles and proper employment of such systems.
- (U) (\$ 95) Establish TTP for LHA/LHD Air Control Tactics in a Marine Expeditionary Force (MEF) environment.
- (U) (\$160) Establish and publish the Damage Curves for Mine Hunting Class 51 and Mine Countermeasures Ship 1 (MCM-1).
- (U) (\$160) Develop TTP for doing Anti-Submarine Warfare Using the A-Comms communications system.
- (U) (\$200) Establish TTP for Torpedo Employment in a Korean geographic area in support of the current Operations (Op) plan.

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DATE: FEBRUARY 2002

BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605155N

PROJECT NUMBER: R0151

PROGRAM ELEMENT TITLE: Fleet Tactical Development and
Evaluation

PROJECT TITLE: Intertype Tactical
Development and Evaluation

- (U) (\$225) Establish TTP for Mine Counter Measure Reconnaissance Tactics.
- (U) (\$110) Establish TTP for Helicopter Intercept of Low Slow Flyer.
- (U) (\$140) Develop TTP for employment of the Minehunter Coastal (MHC) Dyad Influence Sweeping system.
- (U) (\$175) Establish and publish the TTP for Preemptive Launch of Infrared (IR) Decoys in a hostile landing zone.
- (U) (\$100) Develop TTP to delineate Air Defense Command Relationship for CVBG Support ARG.
- (U) (\$110) Develop TTP for employment of the P-3 in a Naval Surface Fires Supporting role.
- (U) (\$ 60) Develop TTP for employment of E-2C II as an Overland Surface Detection and Tracking asset.
- (U) (\$224) Develop TTP to defend naval shore establishments against terrorist attacks.
- (U) (\$225) Develop TTP to defend naval port facilities against terrorist attacks.
- (U) (\$190) Develop TTP to defend submarines in foreign ports against terrorist attacks.
- (U) (\$ 57) Program Support.

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DATE: FEBRUARY 2002

BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605155N

PROJECT NUMBER: R0151

PROGRAM ELEMENT TITLE: Fleet Tactical Development and
Evaluation

PROJECT TITLE: Intertype Tactical
Development and Evaluation

3. (U) FY 2003 PLAN:

- (U) (\$150) Develop TTP for multiple-ship Anti-Ship Torpedo Defense.
- (U) (\$150) Develop TTP for Mine Warfare Battlespace Environmental Assessments.
- (U) (\$180) Develop TTP to maximize the effectiveness of the AH-1W Night Targeting System.
- (U) (\$130) Develop TTP for the Employment of Multi-Static Assets.
- (U) (\$110) Develop TTP to coordinate the use of multiple ASW Tactical Decision Aids.
- (U) (\$230) Develop TTP to more effectively utilize submarine launched torpedoes in specific geographic areas.
- (U) (\$160) Develop TTP for the utilization of High Frequency (HF) Active Engagement.
- (U) (\$130) Develop TTP to govern Tactical Naval Information Operations Support to Humanitarian Assistance Operations.
- (U) (\$130) Develop TTP for the use of the Advanced SEAL Delivery System (SDS) by SSNs.
- (U) (\$180) Develop TTP for the effective utilization of the AH-1W in a Close Air Support role.
- (U) (\$130) Develop TTP to govern the Crafting of the Tactical Force Influence Operations Posture.

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FY 2003 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET

DATE: FEBRUARY 2002

BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605155N

PROJECT NUMBER: R0151

PROGRAM ELEMENT TITLE: Fleet Tactical Development and
Evaluation

PROJECT TITLE: Intertype Tactical
Development and Evaluation

- (U) (\$120) Develop TTP for Counter-Influence Operations for the CVBG/ARG Commanders.
- (U) (\$240) Develop TTP required to maintain C4I tactical capabilities against an electronic jamming threat.
- (U) (\$180) Develop TTP to utilize Synthetic Aperture Radars to provide target ID.
- (U) (\$130) Develop TTP for the Joint Staff embark aboard a deployed ARG/MEU flagship.
- (U) (\$180) Develop TTP for the employment of electronic warfare assets in the littoral.
- (U) (\$193) Develop TTP for the employment of Organic MCM Assets in support of the ARG/MEU.
- (U) (\$48) Program Support.

B. (U) PROGRAM CHANGE SUMMARY:

(U) FY 2002 President's Budget:	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>
(U) Adjustments from PRESBUDG	2,715	2,912	
(U) SBIR Adjustment	-40		
(U) Section 8123 - Management Reform Initiative Reduction		-26	
(U) FY 2003 President's Budget Submission:	2,675	2,886	2,771

(U) Schedule: Not applicable.

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FY 2003 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET

DATE: FEBRUARY 2002

BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605155N

PROJECT NUMBER: R0151

PROGRAM ELEMENT TITLE: Fleet Tactical Development and
Evaluation

PROJECT TITLE: Intertype Tactical
Development and Evaluation

(U) Technical: Not applicable.

C. (U) OTHER PROGRAM FUNDING SUMMARY: Not applicable.

D. (U) SCHEDULE PROFILE: Not applicable.

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Budget Item Justification
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FY 2003 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET

DATE: February 2002

BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605804N

PROGRAM ELEMENT TITLE: Technical Information Services

(U) COST: (Dollars in Thousands)

PROJECT NUMBER & TITLE	FY 2001 ACTUAL	FY 2002 ESTIMATE	FY 2003 ESTIMATE	FY 2004 ESTIMATE	FY 2005 ESTIMATE	FY 2006 ESTIMATE	FY 2007 ESTIMATE	TO COMPLETE	TOTAL PROGRAM
R0835	Technical Information Services	921	943	929	959	986	1,005	1,022	CONT.
R2296	Federal Lab Consortium	282	0	0	0	0	0	0	1,506
R2322	Acquisition Center for Excellence (ACE)	643	0	0	0	0	0	0	23,390
R2969	Supply Chain Management	3,872	1,982	0	0	0	0	0	5,854
R2970	Commercialization of Advanced Technology Programs	5,806	5,055	0	0	0	0	0	10,861
R9093	Lean Pathways Project Expansion & Distance Learning	0	2,181	0	0	0	0	0	2,181
Total		11,524	10,161	929	959	986	1,005	1,022	CONT.

A. (U) MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: Technical Information Services provides support to achieve affordability in the development of Navy systems and reduction of life-cycle costs through the facilitation of advanced technology associations between U.S. industry and the Navy. The goals for project R0835 are met through the following:

- (U) Navy leverage of the industry independent research and development science and technology base by facilitation of voluntary Technical Information Meetings between Navy, DOD components, and the private sector.
- (U) Support for the Navy Acquisition Research and Development Information Center (NARDIC) to provide the private sector with information on Navy research and development requirements and advanced acquisition information.

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FY 2003 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET

DATE: February 2002

BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605804N

PROGRAM ELEMENT TITLE: Technical Information Services

(U) Transfer of appropriate Navy-developed innovative concepts and inventions to the private sector for purposes of commercialization (Public Law 96-480, Federal Technology Transfer Act of 1986) through Cooperative Research and Development Agreements and Patent License Agreements through Offices of Research and Technology Applications.

- (U) Promotion of advanced information acquisition and distribution techniques (in conjunction with the Defense Technical Information Center (DTIC)) to disseminate research, development, and technology transfer efforts of Navy components, including the networking of Navy components' technology transfer databases Scientific and Technical Information Program (STIP).

- (U) Support for controlled access to, and exchange of, scientific and technical information by Navy/DOD components and present/potential contractors Navy Potential Contractor Program (NPCP).

(U) This program also provides the DON interface to the Office of the Deputy UnderSecretary of Defense (Science & Technology), Office of Technology Transition for matters relating to policy and DOD reporting requirements for technology transfer.

(U) JUSTIFICATION FOR BUDGET ACTIVITY: This program is funded under RDT&E MANAGEMENT SUPPORT because it supports the operations required for general research and development use.

(U) PROGRAM CHANGE FOR TOTAL P.E.:

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FY 2003 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET

DATE: February 2002

BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605804N

PROGRAM ELEMENT TITLE: Technical Information Services

	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>
(U) FY 2002 President's Budget:	10,848	951	
(U) SBIR/STTR Transfer	-249	-	
(U) Federal Technology Transfers	282	-	
(U) Program Adjustments	643	-	
(U) Section 8123 Management Reform/Initiative Reduction	-	-90	
(U) Congressional Plus ups	-	9,300	
(U) FY 2003 President Budget Submission:	11,524	10,161	929

(U) Schedule: Not applicable.

(U) Technical: Not applicable.

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Budget Item Justification
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FY 2003 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET

DATE: February 2002

BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605804N

PROJECT NUMBER: R0835

PROGRAM ELEMENT TITLE: Technical Information

PROJECT TITLE: Technical Information Services

(U) COST: (Dollars in Thousands)

PROJECT NUMBER & TITLE	FY 2001 ACTUAL	FY 2002 ESTIMATE	FY 2003 ESTIMATE	FY 2004 ESTIMATE	FY 2005 ESTIMATE	FY 2006 ESTIMATE	FY 2007 ESTIMATE	TO COMPLETE	TOTAL PROGRAM
R0835									
Technical Information Services									
	921	943	929	959	986	1,005	1,022	CONT.	CONT.

A. (U) MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: This program provides support to achieve affordability in the development of Navy systems and reduction of life-cycle costs through the facilitation of advanced technology associations between U.S. industry and the Navy. These goals are met through the following:

- (U) Navy leverage of the industry independent research and development science and technology base by facilitation of voluntary Technical Information Meetings between Navy, DOD components, and the private sector.
- (U) Support for the Navy Acquisition Research and Development Center (NARDIC) to provide the private sector with information on Navy research and development requirements and advanced acquisition information.
- (U) Transfer of appropriate Navy-developed innovative concepts and inventions to the private sector for purposes of commercialization (Public Law 96-480, Federal Technology Transfer Act of 1986) through Cooperative Research and Development Agreements and Patent License Agreements through Offices of Research and Technology Applications.
- (U) Promotion of advanced information acquisition and distribution techniques (in conjunction with the Defense Technical Information Center (DTIC)) to disseminate research, development, and technology transfer efforts of Navy

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FY 2003 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET

DATE: February 2002

BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605804N

PROJECT NUMBER: R0835

PROGRAM ELEMENT TITLE: Technical Information

PROJECT TITLE: Technical Information Services

components, including the networking of Navy components' technology transfer databases (Scientific and Technical Information Program (STIP)).

- (U) Support for controlled access to, and exchange of, scientific and technical information by Navy/DOD components and present/potential contractors (Navy Potential Contractor Program (NPCP)).
- (U) This program also provides the DON interface to the Office of the Deputy UnderSecretary of Defense (Science & Technology), Office of Technology Transition for matters relating to policy and DOD reporting requirements for technology transfer.

1. (U) FY 2001 ACCOMPLISHMENTS:

- (U) (\$921) Maintained coordination efforts with Systems Commands, Program Executive Offices, Direct Reporting Program Managers, and Navy laboratories and warfare centers to leverage industry research and development efforts to meet Navy performance/affordability needs. Encouraged submission of technical data by the private sector to the DTIC database in order to help integrate defense production with the commercial industrial base. Supported revitalization of the Industrial Research and Development (IR&D) program by increasing awareness of Naval opportunities and of IR&D benefits. Developed and published guidance for Naval potential contractors. Supported the NARDIC as the primary outreach resource to the private sector, including development and maintenance of electronic bulletin boards residing on the World Wide Web. Held a workshop with the Industrial Research Institute focused on partnership opportunities. With the Systems Commands, held the Annual Naval-Industry Partnership Conference to heighten industry awareness of Navy and Marine Corps Systems Commands technology and development needs. Focus topics included technology-gathering practices of successful organizations, shipbuilding industry improvements, TECH Solutions - a web-based tool to address readiness and quality of service problems, partnering with Navy labs, and more. Business to Business and Government to Business Marketplaces at the conference provided a forum for informal one-on-one discussions. Supported and maintained the networked technology tracking of technology transfer efforts. Supported a commercialization pilot project for patented technologies from Navy laboratories. Technologies include commercialization of non-volatile random access magnetic memory, biofilm coating for titanium, and a pressure flow sensor. Navy laboratories entered 167 new Cooperative Research and Development Agreements in areas such as the following: advanced distributed learning, missile development, information technology, protective clothing and equipment, vaccine research, wireless networking, advanced rotor craft technology, and alternative cooling technologies.

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DATE: February 2002

BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605804N

PROJECT NUMBER: R0835

PROGRAM ELEMENT TITLE: Technical Information

PROJECT TITLE: Technical Information Services

Supported the Navy Office of Research and Technology Applications (ORTA) through the National Technology Transfer Center (NTTC) Entrepreneurial Training Apprenticeship Program (ETAP) which provided a minority student to work in the ORTA supporting technical information services and technology transfer activities.

2. (U) FY 2002 PLAN:

- (U) (\$943) Maintain Coordination efforts with Systems Commands, Program Executive Offices, Direct Reporting Program Managers, and Navy laboratories and warfare centers to leverage industry research and development efforts to meet Navy performance/affordability needs. Encourage submission of technical data by the private sector to the DTIC database in order to help integrate defense production with the commercial industrial base. Support the NARDIC as the primary outreach resource to the private sector, including maintenance of electronic bulletin boards residing on the World Wide Web. Support workshops on topics identified in the Annual Naval-Industry R&D Partnership Conference to heighten industry awareness of Navy and Marine Corps Systems Commands technology and development needs to support the Naval short and long-term operational requirements. Conduct an annual Partnership Conference to address the expansion of research and development by private sources. Coordinate with the Naval Fleet/Force Technology Innovation Office to expand Navy and Marine Corps partnership efforts to leverage Navy, corporate, and university technologies. Support and maintain the networked technology transfer database capability at the laboratory, ONR, and DoD levels, which enables the tracking of technology transfer efforts.

3. (U) FY 2003 PLAN:

- (U) (\$929) Maintain Coordination efforts with Systems Commands, Program Executive Offices, Direct Reporting Program Managers, and Navy laboratories and warfare centers to leverage industry research and development efforts to meet Navy performance/affordability needs. Encourage submission of technical data by the private sector to the DTIC database in order to help integrate defense production with the commercial industrial base. Support the NARDIC as the primary outreach resource to the private sector, including maintenance of electronic bulletin boards residing on the World Wide Web. Support workshops on topics identified in the Annual Naval-Industry R&D Partnership Conference to heighten industry awareness of Navy and Marine Corps Systems Commands technology and development needs to support the Naval short and long-term operational requirements. Conduct an annual Partnership Conference to address the expansion of research and development by private sources. Coordinate with the Naval Fleet/Force Technology Innovation Office to expand Navy and Marine Corps partnership

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FY 2003 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET

DATE: February 2002

BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605804N

PROJECT NUMBER: R0835

PROGRAM ELEMENT TITLE: Technical Information

PROJECT TITLE: Technical Information Services

efforts to leverage Navy, corporate, and university technologies. Support and maintain the networked technology transfer database capability at the laboratory, ONR, and DoD levels, which enables the tracking of technology transfer efforts.

B. (U) PROGRAM CHANGE SUMMARY: See total program change summary for P.E.

C. (U) OTHER PROGRAM FUNDING SUMMARY: Not applicable.

D. (U) RELATED RDT&E: Not applicable.

E. (U) SCHEDULE PROFILE: Not applicable

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FY 2003 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET

DATE: February 2002

BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605804N

PROGRAM ELEMENT TITLE: Technical Information Services

CONGRESSIONAL PLUS-UPS

This section describes the following Congressional Plus-Ups appropriated in this program element:

Commercialization of Advanced Technology Program Lean Pathways Project Expansion & Distance Learning Supply Chain Best Practices

1. FY 2001 Congressional Plus-ups:

- (U) (\$5,806), Commercialization of Advanced Technology Program: FY01 Congressional plus-up initiated a cooperative approach to the transfer and transition of DoD technology components. This cooperative approach involves a partnership between SSC San Diego, industry and universities initiated by Cooperative Agreement No. N66001-01-2-8910 signed 26 June 2001. The two-year pilot program will test the feasibility and success of the Center for Commercialization for Advance Technology (CCAT) processes across the Navy. The CCAT will identify, evaluate, and fund technological concepts from such sources as local universities and industry, research laboratories, and SSC San Diego. If successful, the CCAT could offer the Navy an effective, streamlined way to increase investments to and from government and commercial applications.
- (U) (\$3,872), Supply Chain Management: Funds provided for the Navy's Supply Chain Practices for Affordable Navy Systems (SPANS) Project. The purpose of the project is to improve the affordability of Navy Acquisition programs by increasing the efficiency of the supply chain networks. It is currently estimated that supply chain costs account for 60-70% of acquisition costs. The project will develop and deploy changes in supply chain management technologies that will increase the efficiency of transactions, business processes, relationships, and networks within Navy Supply chains. The work focused on developing a strategic plan and project initiatives such as Supply Chain Simulation and Electronic Transmittal of Technical Data Packages.

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DATE: February 2002

BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605804N

PROGRAM ELEMENT TITLE: Technical Information Services

2. FY 2002 Congressional Plus-ups:

- (U) (\$5,055), Commercialization of Advanced Technology Programs: FY02 Congressional plus-up will expand into the other regions of California a cooperative approach to transfer and transition Navy/DoD technology components for commercialization by industry that was initiated by FY01 Congressional plus-up. The partnership will build on the Center for Commercialization for Advanced Technology (CCAT) process which is currently being developed. If successful, the CCAT could offer the Navy an effective, streamlined way to increase investments to and from government and commercial applications.
- (U) (\$2,181), Lean Pathways Project Expansion & Distance Learning: Funds were appropriated for the expansion of the Navy's Mantech Lean Pathways project (0708011N) and for the development of a distance learning delivery mechanism for the project. The purpose of the project is to improve the capability of the Navy's sub-tier suppliers by introducing them to Lean Manufacturing practices. Training and implementation support is provided by the project to these suppliers in collaboration with the prime contractors. The work in FY2001 focused on delivering Lean-Pathways technologies to the supplier base. FY2002 efforts will continue the delivery but will also focus on the development of a distance learning capability that will improve the cost effectiveness of the project. The goal is to improve quality while reducing costs and delivery times to the primes from their subcontractors.
- (U) (\$1,982), Supply Chain Management: Funds provided for the continuation of the Navy's Supply Chain Practices for Affordable Navy Systems (SPANS) project. The purpose of the project is to improve the affordability of Navy Acquisition programs by increasing the efficiency of the supply chain networks. It is currently estimated that supply chain costs account for 60%-70% of acquisition costs. The project will develop and deploy changes in supply chain management technologies that will increase the efficiency of transactions, business processes, relationships, and networks within Navy supply chains. The FY02 effort will be a continuation of the project initiatives and deployment of project results to the industry. The goal is to reduce acquisition costs and lead-times by increasing the affordability and responsiveness of the supply chains.

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CLASSIFICATION:

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EXHIBIT R-2, RDT&E Budget Item Justification							DATE:			
							February 2002			
APPROPRIATION/BUDGET ACTIVITY					R-1 ITEM NOMENCLATURE					
RESEARCH DEVELOPMENT TEST & EVALUATION, NAVY/BA 6					Management, Technical and International Support/0605853N					
COST (\$ in Millions)		FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY2007	Cost to Complete	Total Cost
Total PE Cost		18.579	27.413	50.787	33.618	34.377	35.975	37.215	Cont.	Cont.
S3039 CHENG		0.000	11.561	33.063	15.367	15.746	16.964	17.793	Cont.	Cont.
R0149 International Cooperative RDT&E		1.876	1.723	1.903	1.937	2.027	2.071	2.115	Cont.	Cont.
R1767 Naval War College/Center for Naval Warfare Studies		2.484	2.633	3.021	3.086	3.138	3.196	3.253	Cont.	Cont.
X2221 Assessment Program		14.219	11.496	12.800	13.228	13.466	13.744	14.054	Cont.	Cont.
Quantity of RDT&E Articles		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
A. (U) MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: This Program Element provides management and technical support for several national and international projects:										
<p>(U) Project S3039 provides the Assistant Secretary of the Navy, Research Development and Acquisition (ASN (RDA)) the engineering base and senior leadership focus within the acquisition structure for integration and interoperability across all Navy and Marine Corps Program Executive Offices (PEO's), Program Managers (PMs), and System Commands (SYSCOMs). This program addresses integration and interoperability of current and future combat, weapons, and command, control, communications, computer and intelligence (C4I) systems acquired by the DoN. Representative engineering activities provided by the Chief Engineer (CHENG) include: leading the functional design of combat and C4I system functions with respect to overall warfare operational architectures, approval of system level interface specifications for all referenced systems; assessing and approving interface changes that impact interoperability prior to fleet introduction; assuring that individual systems adhere to the resulting configuration; providing centralized Naval input to Office of the Undersecretary of Defense, Science and Technology (OUSD (S&T)) on matters related to software intensive systems; and establishing the technical basis for recommended investment decisions and program priorities to ASN (RDA) and the appropriate service chief concerning fielding systems and planned future counterparts. This program develops the Naval Collaborative Engineering Environment as the primary means to support information sharing and decision analyses, interactive analyses of system design alternatives, and data management and configuration control between Navy Laboratories, test facilities and industry engineering teams.</p>										
<p>(U) Project R0149 provides program management, execution, and support to implement a broad range of cooperative naval research and development (R&D) initiatives with allied and friendly nations. Potential cooperative programs are pursued to fulfill established operational requirements, enhance U.S./allied interoperability and standardization, obtain unique foreign technologies, and reduce U.S. developmental and production costs.</p>										
<p>(U) Project R1767 provides funding for Naval War College (NWC) research activities, which serve as a focal point, stimulus, and major source of strategic and campaign thought within the Navy. These efforts generate strategy and campaign alternatives, provide for evaluation through war-gaming methodologies, and provide recommendations to the Chief of Naval Operations (CNO) and fleet commanders regarding the formulation and execution of strategy.</p>										
<p>(U) Project X2221 provides analytical and management support for the Planning/Assessment process. This project supports the development of annual Integrated Warfare Architectures (IWARS)/Chief of Naval Operations Program Assessment Memorandum (CPAM)/Joint Warfighting Capability assessments which provide the analytical underpinnings and basis for programmatic decisions made by the Navy's top leadership regarding integration of Navy warfare/support requirements.</p>										

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Exhibit R-2, RDT&E Budget Item Justification
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EXHIBIT R-2, RDT&E Budget Item Justification		DATE: February 2002	
APPROPRIATION/BUDGET ACTIVITY RESEARCH DEVELOPMENT TEST & EVALUATION, NAVY/BA 6		R-1 ITEM NOMENCLATURE Management, Technical and International Support/0605853N	
 B. (U) Program Change Summary:			
	FY 2001	FY 2002	FY 2003
(U) FY 2002 President's Budget:	17.481	21.628	0.000
(U) Appropriated Value:	17.644	18.628	
(U) Adjustments to FY 2001/2002 Appropriated Value/			
FY 2002 President's Budget:	0.935	8.785	
(U) FY 2003 President's Budget Submit	18.579	27.413	50.787
 Funding:			
FY 2001: Program Adjustments (+\$1.602), SBIR Assessment (-\$.315), and minor pricing adjustments of (-\$.352)			
FY 2002: Transfer of funds from O&MN (+\$12.075), Program Assessment (-\$3.000), and Minor Pricing Adjustments (-\$.290)			

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Exhibit R-2, RDT&E Budget Item Justification
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CLASSIFICATION:

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EXHIBIT R-2a, RDT&E Budget Item Justification							DATE: February 2002			
APPROPRIATION/BUDGET ACTIVITY RDT&E, N BA-6		PROGRAM ELEMENT NUMBER AND NAME 0605853N/Management, Technical and International Spt			PROJECT NUMBER AND NAME S3039 CHENG					
COST (\$ in Millions)		FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	Cost to Complete	Total Program
Project Cost		0	11.561	33.063	15.367	15.746	16.964	17.793	Cont.	Cont.
RDT&E Articles Qty										
<p>A. (U) Mission Description and Budget Item Justification Mission: This project provides for ASN (RDA) identification and resolution of integration and interoperability issues across all Navy and Marine Corps programs early in the acquisition process. The Chief Engineer provides the engineering base and leads the system engineering activities that address the significant challenges posed by the increasingly complex warfighting capabilities of new systems and their integration with in-service systems on ships, submarine, aircraft, satellite, and land facilities and units.</p> <ul style="list-style-type: none"> -(U) Define Mission Capability Packages (MCPs) from a system-of-system perspective to collectively achieve or exploit warfighting capabilities. -(U) Lead the functional allocation of combat and C4I system functions, and the definition and control of critical interfaces between component systems within a MCP. -(U) Develop the overall performance requirements and the data flow, control flow, and error budgets, and time latencies required to achieve desired MCP capability/effectiveness. -(U) Assess the risk of achieving the capabilities/effectiveness introduced by technical and programmatic changes to MCP programs during their execution. -(U) Research the underlying technical issues and related technologies that enable the development of needed standards, policies and guidelines to address root impediments to integration and interoperability. -(U) Develop the Naval Collaborative Engineering Environment to enable efficient and interactive integration and interoperability engineering design and implementation throughout the Naval acquisition community by networking DON laboratory capabilities and test facilities to support information sharing and decision analysis, interactive analysis of design alternatives, and data management and configuration control of approved requirements. -(U) Implement the Navy Single Integrated Air Picture (SIAP) Systems Engineering for the Joint Task Force to identify and recommend the most effective and efficient means to achieve a SIAP capability that satisfies warfighter needs. <p>(U) PROGRAM ACCOMPLISHMENTS AND PLANS:</p> <p>(U) FY 2001 ACCOMPLISHMENTS: N/A</p>										

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Exhibit R-2a, RDT&E Budget Item Justification
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EXHIBIT R-2a, RDT&E Budget Item Justification		DATE: February 2002
APPROPRIATION/BUDGET ACTIVITY RDT&E, N BA-6	PROGRAM ELEMENT NUMBER AND NAME 0605853N/Management, Technical and International Spt	PROJECT NUMBER AND NAME S3039 CHENG
<p>(U) FY 2001 ACCOMPLISHMENTS: Not applicable.</p> <p>(U) FY 2002 PLAN:</p> <ul style="list-style-type: none">- (U) (\$2.246) Architecture Development. Conduct functional analyses for six POM 04 Mission Capability Packages (MCPs): Time Critical Targeting (TST); Theater Air and Missile Defense (TAMD), Anti-Submarine Warfare (ASW); Battle Management Command and Control (BFC²); Information, Surveillance and Reconnaissance (ISR); and Navigation. Develop system and technical architectures that describe the physical, functional and organizational relationships among systems/programs within each MCP. Assess and benchmark each MCP architecture to support POM 04 decisions.- (U) (\$2.723) Large Scale Systems Engineering Processes. Conduct MCP performance assessments: TST, TAMD, and Undersea Warfare (USW) element of ASW. Develop the knowledge base required to support integration and interoperability risk assessments of TST, TAMD, and USW systems including a working definition of interoperability metrics and operational analysis processes to relate these metrics to warfighting costs and operational performance.- (U) (\$1.686) Naval Collaborative Engineering Environment. Develop the decision support capability to support development of the POM 04 MCPs. Prototype and demonstrate the engineering environment and related integrated databases for TST, TAMD, and USW systems.- (U) (\$.906) Standards Policies and Guidelines. Develop and implement integration and implementation acquisition policy and standards, e.g. Risk Advisory Board (RAB), Joint Technical Architecture (JTA), Defense Integration and Interoperability Common Operational Environment (DII COE), Anti-Tamper.- (U) (\$1.137) Mission Area Coordinator. Coordinate integration and implementation priorities and issue resolution with OPNAV and Fleet Representatives.- (U) (\$2.863) Core. Provide engineering and technical staff to direct integration and interoperability priorities across Navy and Marine Corps Systems Commands, laboratories, and field activities.		

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EXHIBIT R-2a, RDT&E Budget Item Justification			DATE: February 2002																																	
APPROPRIATION/BUDGET ACTIVITY RDT&E, N BA-6	PROGRAM ELEMENT NUMBER AND NAME 0605853N/Management, Technical and International Spt	PROJECT NUMBER AND NAME S3039 CHENG																																		
<p>(U) FY2003 PLAN:</p> <ul style="list-style-type: none"> - (U) (\$10.300) Architecture Development. Complete and refine architectures for MCPs developed in FY 02 to reflect POM 04 decisions. Perform architecture assessments to support PR 05 issues. - (U) (\$3.800) Large Scale Systems Engineering Processes. Re-validate TCT, TAMD, and USW MCP performance assessment to reflect POM 04 decisions. Continue development of the knowledge base for TCT, TAMD, and USW systems. Conduct risk assessments for ASN(RDA) metric reviews and PR 05 issue development. - (U) (\$2.300) Naval Collaborative Engineering Environment (NCEE). Complete the prototype demonstration of NCEE capabilities for TCT, TAMD, and USW systems. Initiate the extension to the BFC², ISR and Navigation (NAV) MCPs. - (U) (\$1.000) Standards Policies and Guidelines. Develop and implement integration and interoperability acquisition policy and standards, e.g. RAB, JTA, DII COE, Anti-Tamper. - (U) (\$1.500) Mission Area Coordinator. Coordinate integration and interoperability priorities and issue resolution with OPNAV and Fleet Representatives. - (U) (\$3.163) Core. Provide engineering and technical staff to direct integration and interoperability priorities across Navy and Marine Corps Systems Commands, laboratories, and field activities. - (U) (\$11.000) SIAP. Provide subject matter experts for SIAP BLK 1 system engineering issues, cost/benefit, analysis, metrics development and lessons learned. Develop proposals for engineering solutions, validate cost estimates, and provide Modeling and Simulation and Independent Verification and Validation support. 																																				
<p>B. (U) OTHER PROGRAM FUNDING SUMMARY: (Dollars in Millions)</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 35%;"></th> <th style="width: 10%;">FY01</th> <th style="width: 10%;">FY02</th> <th style="width: 10%;">FY03</th> <th style="width: 10%;">FY04</th> <th style="width: 10%;">FY05</th> <th style="width: 10%;">FY06</th> <th style="width: 10%;">FY07</th> </tr> </thead> <tbody> <tr> <td>O&MN</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>PE0708012N/0701113N 1C6C</td> <td>16.702</td> <td>2.785</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> </tr> <tr> <td>PE0702096N 4B2N</td> <td>0</td> <td>1.000</td> <td>1.020</td> <td>1.040</td> <td>1.060</td> <td>1.082</td> <td>1.100</td> </tr> </tbody> </table>						FY01	FY02	FY03	FY04	FY05	FY06	FY07	O&MN								PE0708012N/0701113N 1C6C	16.702	2.785	0	0	0	0	0	PE0702096N 4B2N	0	1.000	1.020	1.040	1.060	1.082	1.100
	FY01	FY02	FY03	FY04	FY05	FY06	FY07																													
O&MN																																				
PE0708012N/0701113N 1C6C	16.702	2.785	0	0	0	0	0																													
PE0702096N 4B2N	0	1.000	1.020	1.040	1.060	1.082	1.100																													
<p>C. (U) ACQUISITION STRATEGY: Not Applicable</p>																																				
<p>D. (U) SCHEDULE PROFILE: Not Applicable.</p>																																				

R-1 SHOPPING LIST - Item No.158-5 of 158-13

Exhibit R-2a, RDT&E Budget Item Justification
(Exhibit R-2a, page 5 of 13)

UNCLASSIFIED

CLASSIFICATION:

UNCLASSIFIED

Exhibit R-3 Cost Analysis (page 1)							DATE: February 2002					
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NAME AND NUMBER						
RDT&E, N/BA-6			0605853N			Management, Technical and International Support/0605853N-S3039 CHENG						
Cost Categories (Tailor to WBS, or System/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 01 Cost	FY 01 Award Date	FY 02 Cost	FY 02 Award Date	FY 03 Cost	FY 03 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Architecture Definition	Contract	JHU/APL	0.000	0.000		0.085	01/02	0.125	11/02	CONT	CONT	TBD
Architecture Definition	RCP	CNO/C N A	0.000	0.000		0.101	01/02	0.125	11/02	CONT	CONT	TBD
Architecture Definition	WR	NAWC		0.000		0.205	12/01	0.350	10/02	CONT	CONT	
Architecture Definition	WR	NRL		0.000		0.025	12/01	0.025	10/02	CONT	CONT	
Architecture Definition	WR	NSWC/DD	0.000	0.000		0.076	12/01	0.350	10/02	CONT	CONT	TBD
Architecture Definition	Various	SPAWAR		0.000		0.421	12/01	0.525	10/02	CONT	CONT	
Architecture Definition	Various	Lead Lab		0.000		0.225	01/02	0.355	11/02	CONT	CONT	
Architecture Definition	WR	MCSC		0.000		0.095	12/01	0.125	10/02	CONT	CONT	
Architecture Definition	Contract	Booz-Allen		0.000		0.263	01/02	0.375	11/02	CONT	CONT	
Architecture Definition	Contract	SAIC		0.000		0.320	01/02	0.400	11/02	CONT	CONT	
Architecture Definition	Contract	BAE		0.000		0.264	01/02	0.320	11/02	CONT	CONT	
Architecture Definition	Contract	Logicon	0.000	0.000		0.166	01/02	0.225	11/02	CONT	CONT	
Architecture Definition	Various	Various		0.000		0.000		7.000	10/02	CONT	CONT	
Large Scale Systems Engineering	Contract	JHU/APL	0.000	0.000		0.595	01/02	0.500	11/02	CONT	CONT	TBD
Large Scale Systems Engineering	RCP	CNO/C N A	0.000	0.000		0.295	12/01	0.395	11/02	CONT	CONT	
Large Scale Systems Engineering	WR	MCSC	0.000	0.000		0.100	12/01	0.150	10/02	CONT	CONT	
Large Scale Systems Engineering	WR	NAWC	0.000	0.000		0.680	12/01	0.800	10/02	CONT	CONT	
Large Scale Systems Engineering	WR	NSWC/DD	0.000	0.000		0.274	12/01	0.550	10/02	CONT	CONT	
Large Scale Systems Engineering	Various	SPAWAR	0.000	0.000		0.538	12/01	0.950	10/02	CONT	CONT	TBD
Large Scale Systems Engineering	Various	Lead Lab	0.000	0.000		0.241	01/02	0.455	11/02	CONT	CONT	TBD
Naval Collaborative Eng Eviron	Contract	JHU/APL	0.000	0.000		0.290	01/02	0.400	11/02	CONT	CONT	TBD
Naval Collaborative Eng Eviron	WR	NAWC	0.000	0.000		0.223	12/01	0.256	10/02	CONT	CONT	TBD
Naval Collaborative Eng Eviron	WR	NSWC/DD	0.000	0.000		0.379	12/01	0.604	10/02	CONT	CONT	TBD
Naval Collaborative Eng Eviron	WR	NSWC/PHD Dam Neck	0.000	0.000		0.086	12/01	0.100	10/02	CONT	CONT	
Naval Collaborative Eng Eviron	WR	NUWC/N	0.000	0.000		0.134	12/01	0.150	10/02	CONT	CONT	TBD
Naval Collaborative Eng Eviron	Various	SPAWAR	0.000	0.000		0.265	12/01	0.350	10/02	CONT	CONT	
Naval Collaborative Eng Eviron	Contract	ANTEON	0.000	0.000		0.154	01/02	0.200	11/02	CONT	CONT	
Naval Collaborative Eng Eviron	Contract	BAE	0.000	0.000		0.155	01/02	0.240	11/02	CONT	CONT	
Subtotal Product Development			0.000	0.000		6.655		16.400		CONT	CONT	
Remarks:												

R-1 SHOPPING LIST - Item No. 158-6 of 158-13

Exhibit R-3, Project Cost Analysis
(Exhibit R-3, page 6 of 13)

UNCLASSIFIED

CLASSIFICATION:

UNCLASSIFIED

Exhibit R-3 Cost Analysis (page 1)								DATE: February 2002				
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NAME AND NUMBER						
RDT&E, N/BA-6			0605853N			Management, Technical and International Support/0605853N-S3039 CHENG						
Cost Categories (Tailor to WBS, or System/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 01 Cost	FY 01 Award Date	FY 02 Cost	FY 02 Award Date	FY 03 Cost	FY 03 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Standards, Policy and Guidelines	WR	MCSC	0.000	0.000		0.065	01/02	0.075	10/02	CONT	CONT	TBD
Standards, Policy and Guidelines	WR	NAWC/CL	0.000	0.000		0.065	12/01	0.075	10/02	CONT	CONT	TBD
Standards, Policy and Guidelines	WR	NSWC/DD	0.000	0.000		0.065	12/01	0.075	10/02	CONT	CONT	TBD
Standards, Policy and Guidelines	WR	NUWC/N	0.000	0.000		0.065	12/01	0.070	10/02	CONT	CONT	TBD
Standards, Policy and Guidelines	Contract	ONR/BMPCOE	0.000	0.000		0.165	01/02	0.165	11/02	CONT	CONT	TBD
Standards, Policy and Guidelines	Various	SPAWAR	0.000	0.000		0.233	12/01	0.250	10/02	CONT	CONT	TBD
Standards, Policy and Guidelines	Contract	ANTEON	0.000	0.000		0.158	01/02	0.190	11/02	CONT	CONT	TBD
Standards, Policy and Guidelines	Contract	Northrup Grumman	0.000	0.000		0.090	01/02	0.100	11/02	CONT	CONT	TBD
Mission Area Coordinator	Contract	JHU/APL	0.000	0.000			01/02		11/02	CONT	CONT	TBD
Mission Area Coordinator	WR	MCSC	0.000	0.000		0.000	12/01	0.025	10/02	CONT	CONT	TBD
Mission Area Coordinator	WR	NAWC/CL	0.000	0.000		0.234	12/01	0.285	10/02	CONT	CONT	TBD
Mission Area Coordinator	WR	NSWC/DD	0.000	0.000		0.080	12/01	0.100	10/02	CONT	CONT	TBD
Mission Area Coordinator	WR	NUWC/N	0.000	0.000		0.100	12/01	0.150	10/02	CONT	CONT	TBD
Mission Area Coordinator	WR	NUWC/PC	0.000	0.000		0.050	12/01	0.060	10/02	CONT	CONT	TBD
Mission Area Coordinator	Various	SPAWAR	0.000	0.000		0.050	12/01	0.075	10/02	CONT	CONT	TBD
Mission Area Coordinator	Contract	ANTEON	0.000	0.000		0.362	01/02	0.440	11/02	CONT	CONT	TBD
Mission Area Coordinator	Various	Lead Lab	0.000	0.000		0.125	01/02	0.125	11/02	CONT	CONT	TBD
Mission Area Coordinator	Contract	WBB	0.000	0.000		0.136	01/02	0.240	11/02	CONT	CONT	TBD
CORE	Contract	MIT/LL	0.000	0.000		0.165	01/02	0.245	11/02	CONT	CONT	TBD
CORE	WR	NSWC/DD	0.000	0.000		0.450	12/01	0.760	10/02	CONT	CONT	TBD
CORE	WR	NSWC/PHD Dam Neck	0.000	0.000		0.150	12/01	0.210	10/02	CONT	CONT	TBD
CORE	Contract	ANTEON	0.000	0.000		0.475	01/02	0.450	11/02	CONT	CONT	TBD
CORE	Contract	Booz-Allen, Hamilton	0.000	0.000		0.057	01/02	0.075	11/02	CONT	CONT	TBD
CORE	Contract	BAE	0.000	0.000		0.385	01/02	0.350	11/02	CONT	CONT	TBD
CORE	Contract	Strategic Insights	0.000	0.000		0.300	01/02	0.300	11/02	CONT	CONT	TBD
CORE	Contract	Troy	0.000	0.000		0.170	01/02	0.200	11/02	CONT	CONT	TBD
CORE	Various	Lead Lab	0.000	0.000		0.711	01/02	0.573	11/02	CONT	CONT	TBD
Single Ingegrated Air Picture	Various	Various	0.000	0.000		0.000		11.000	10/02	CONT	CONT	
Subtotal Product Development			0	0		4.906		16.663		CONT	CONT	
Remarks:												
Total Cost			0.000	0.000		11.561		33.063		CONT	CONT	

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Exhibit R-3, Project Cost Analysis
(Exhibit R-3, page 7 of 13)

UNCLASSIFIED

CLASSIFICATION:

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EXHIBIT R-2a, RDT&E Budget Item Justification							DATE: February 2002			
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME				PROJECT NUMBER AND NAME					
RDT&E, N BA-6	0605853N/Management, Technical and International Spt				R0149 International Cooperative R&D					
COST (\$ in Millions)		FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	Cost to Complete	Total Program
Project Cost		1.876	1.723	1.903	1.937	2.027	2.071	2.115	Cont.	Cont.
RDT&E Articles Qty										
<p>A. (U) MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: This project provides program management, execution, and support to implement a broad range of cooperative naval research and development (R&D) initiatives with allied and friendly nations. Potential cooperative programs are pursued to fulfill established operational requirements, enhance U.S./allied interoperability and standardization, obtain unique foreign technologies, and reduce U.S. developmental and production costs. Such efforts result in:</p> <ul style="list-style-type: none"> - (U) Development and negotiation of approximately 25 International RDT&E Agreements annually with allied and friendly nations. - (U) Execution of over 300-information exchange annexes. - (U) Participation in armaments cooperation including the Conference of NATO Armaments Directors groups (e.g., the NATO Naval Armaments Group), Senior National Representative (SNR) meetings, the Technical Cooperative Program and Scientific Committee National Representatives meetings. -(U) Participation in the Engineering and Scientist Exchange Program (ESEP). <p>(U) PROGRAM ACCOMPLISHMENTS AND PLANS:</p> <p>(U) FY 2001 ACCOMPLISHMENTS:</p> <ul style="list-style-type: none"> - (U) (\$0.391) Continued to support DoN participation at SNR Conferences with allies for harmonization of requirements and identification of potential collaborative R&D projects. - (U) (\$0.889) Continued to support DoN participation in U.S./allied data exchange conferences to identify foreign technologies and R&D projects in which the Navy may desire to collaborate, as well as on-going efforts to initiate/revise/terminate Data Exchange Agreements DEAs to target new technologies and expand, where appropriate, to include exchanges with Former Soviet Union (FSU) countries. - (U) (\$0.409) Continued to update and maintain the DoN data bases for drafting, negotiating, managing and tracking of proposed IAs for "high leverage/high payoff" R&D technology base cooperative projects with key allies and friendly nations. Provided support to Acquisition Integrated Product Teams (IPTs) in evaluating international cooperative alternatives in development of DON programs as well as support to the Office of Secretary of Defense (OSD) International Cooperative Opportunities Group (ICOGs) regarding DON requirements and initiatives. - (U) (\$0.187) Navy participation in the ESEP at approximately two scientists/engineers. Continued to conduct post-assignment analysis of scientists/engineers to better target assignments with emerging technologies and programs at foreign research establishments. 										

R-1 SHOPPING LIST - Item No.158-8 of 158-13

Exhibit R-2a, RDT&E Budget Item Justification
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UNCLASSIFIED

CLASSIFICATION:

UNCLASSIFIED

EXHIBIT R-2a, RDT&E Budget Item Justification		DATE:																								
		February 2002																								
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME																								
RDT&E, N BA-6	0605853N/Management, Technical and International Spt	R0149 International Cooperative R&D																								
<p>(U) FY 2002 PLAN:</p> <ul style="list-style-type: none"> - (U) (\$0.377) Continue to support DoN participation at SNR Conferences with allies for harmonization of requirements and identification of potential collaborative R&D projects. - (U) (\$0.784) Continue to support DoN participation in U.S./allied data exchange conferences to identify foreign technologies and R&D projects in which the Navy may desire to collaborate as well as on-going efforts to initiate/revise/terminate DEAs to target new technologies and expand, where appropriate, to include exchanges with FSU countries. - (U) (\$0.472) Continue to update and maintain the DoN data bases for drafting, negotiating, managing and tracking of proposed IAs for "high leverage/high payoff" R&D technology base cooperative projects with key allies and friendly nations. Provide support to Acquisition IPTs in evaluating international cooperative alternatives in development of DON programs as well as support to OSD ICOGs regarding DON requirements and initiatives. - (U) (\$0.090) Increase the level of Navy participation in the ESEP at approximately four scientists/engineers. Continue to conduct post-assignment analysis of scientists/engineers to better target assignments with emerging technologies and programs at foreign research establishments. <p>(U) FY 2003 PLAN:</p> <ul style="list-style-type: none"> - (U) (\$0.423) Continue to support DoN participation at SNR Conferences with allies for harmonization of requirements and identification of potential collaborative R&D projects. - (U) (\$0.875) Continue to support DoN participation in U.S./allied data exchange conferences to identify foreign technologies and R&D projects in which the Navy may desire to collaborate as well as on-going efforts to initiate/revise/terminate DEAs to target new technologies and expand, where appropriate, to include exchanges with FSU countries. - (U) (\$0.515) Continue to update and maintain the DoN databases for drafting, negotiating, managing, and tracking of proposed IAs for "high leverage/high payoff" R&D technology base cooperative projects with key allies and friendly nations. Provide support to Acquisition IPTs in evaluating international cooperative alternatives in development of DoN programs as well as support to OSD International Cooperative Opportunities Group (ICOGs) regarding DoN requirements and initiatives. - (U) (\$0.090) Maintain a level of Navy participation in the ESEP at approximately two scientists/engineers. Continued to conduct post-assignment analysis of scientists/engineers to better target assignments with emerging technologies and programs at foreign research establishments. <p>B. (U) OTHER PROGRAM FUNDING SUMMARY: (Dollars in Millions)</p> <p>(U) RELATED RDT&E:</p> <table> <thead> <tr> <th></th> <th><u>FY 2001</u></th> <th><u>FY 2002</u></th> <th><u>FY 2003</u></th> <th><u>FY 2004</u></th> <th><u>FY 2005</u></th> <th><u>DY 2006</u></th> <th><u>FY 2007</u></th> </tr> </thead> <tbody> <tr> <td>(U) PE 0605130D (Foreign Comparative Testing)</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>(U) PE 0603790N (NATO Cooperative Research and Development)</td> <td>8.620</td> <td>11.449</td> <td>11.581</td> <td>11.804</td> <td>12.276</td> <td>12.512</td> <td>12.760</td> </tr> </tbody> </table> <p>C. (U) ACQUISITION STRATEGY: Not applicable</p> <p>D. (U) SCHEDULE PROFILE: Not applicable</p>				<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>DY 2006</u>	<u>FY 2007</u>	(U) PE 0605130D (Foreign Comparative Testing)								(U) PE 0603790N (NATO Cooperative Research and Development)	8.620	11.449	11.581	11.804	12.276	12.512	12.760
	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>DY 2006</u>	<u>FY 2007</u>																			
(U) PE 0605130D (Foreign Comparative Testing)																										
(U) PE 0603790N (NATO Cooperative Research and Development)	8.620	11.449	11.581	11.804	12.276	12.512	12.760																			

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Exhibit R-2a, RDT&E Budget Item Justification
 (Exhibit R-2a, page 9 of 13)
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CLASSIFICATION:

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EXHIBIT R-2a, RDT&E Budget Item Justification							DATE: February 2002			
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME				PROJECT NUMBER AND NAME					
RDT&E, N BA-6	0605853N/Management, Technical and International Spt				R1767 Naval War College/Center for Naval Warfare Studies					
COST (\$ in Millions)		FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	Cost to Complete	Total Program
Project Cost		2.484	2.633	3.021	3.086	3.138	3.196	3.253	Cont.	Cont.
RDT&E Articles Qty										
<p>A. (U) MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: Naval War College (NWC) research activities serve as a focal point, stimulus, and major source of strategic and campaign thought within the Navy. These efforts generate strategy and campaign alternatives, provide for evaluation through war-gaming methodologies, and provide recommendations to the Chief of Naval Operations (CNO) and fleet commanders regarding the formulation and execution of strategy.</p> <p>(U) PROGRAM ACCOMPLISHMENTS AND PLANS:</p> <p>(U) FY 2001 ACCOMPLISHMENTS:</p> <ul style="list-style-type: none"> - (U) (\$1.600) Conducted strategic studies in response to SECNAV, CNO, UNIFIED, and Fleet CINC tasking in such areas as maritime strategy, decision support, and direct fleet support. - (U) (\$0.768) Conducted major war games culminating in Global '01. - (U) (\$0.116) Provided for selected NWC students to conduct advanced research projects, including expanded opportunities for advanced research under the Mahan Scholars program. <p>2. (U) FY 2002 PLAN:</p> <ul style="list-style-type: none"> - (U) (\$1.731) Conduct strategic studies in response to SECNAV, CNO, UNIFIED, and Fleet CINC tasking in such areas as maritime strategy, decision support, and direct fleet support. - (U) (\$0.784) Conduct major war games culminating in annual Global War game, including maintenance of legacy Enhanced Naval War gaming System and preparation for implementation of successor Joint Simulation System-Maritime, preparation for implementation of successor Joint Simulation System-Maritime. - (U) (\$0.118) Provide for selected NWC students to conduct advanced research projects. <p>3. (U) FY 2003 PLAN:</p> <ul style="list-style-type: none"> - (U) (\$1.764) Conduct strategic studies in response to SECNAV, CNO, UNIFIED, and Fleet CINC tasking in such areas as maritime strategy, decision support, and direct fleet support. - (U) (\$1.137) Conduct major war games culminating in annual Global War game, including maintenance of legacy Enhanced Naval Wargaming System, preparation for implementation of successor Joint Simulation System-Maritime, and implementation of distributed gaming capability for war games and Fleet Battle Experiments. - (U) (\$0.120) Provide for selected NWC students to conduct advanced research projects. 										

R-1 SHOPPING LIST - Item No.158-10 of 158-13

Exhibit R-2a, RDT&E Budget Item Justification
(Exhibit R-2a, page 10 of 13)

UNCLASSIFIED

CLASSIFICATION:

UNCLASSIFIED

EXHIBIT R-2a, RDT&E Budget Item Justification		DATE: February 2002
APPROPRIATION/BUDGET ACTIVITY RDT&E, N BA-6	PROGRAM ELEMENT NUMBER AND NAME 0605853N/Management, Technical and International Spt	PROJECT NUMBER AND NAME R1767 Naval War College/Center for Naval Warfare Studies
<p>B. (U) OTHER PROGRAM FUNDING SUMMARY: Not applicable.</p> <p>(U) RELATED RDT&E: Not applicable.</p> <p>C. (U) ACQUISITION STRATEGY: Not applicable.</p> <p>D. (U) SCHEDULE PROFILE: Not applicable.</p>		

R-1 SHOPPING LIST - Item No.158-11 of 158-13

Exhibit R-2a, RDT&E Budget Item Justification
(Exhibit R-2a, page 11 of 13)

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CLASSIFICATION:

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EXHIBIT R-2a, RDT&E Budget Item Justification							DATE: February 2002			
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME				PROJECT NUMBER AND NAME					
RDT&E, N BA-6	0605853N/Management, Technical and International Spt				X2221 Assessment Program					
COST (\$ in Millions)		FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	Cost to Complete	Total Program
Project Cost		14.219	11.496	12.800	13.228	13.466	13.744	14.054	CONT	CONT
RDT&E Articles Qty										
<p>(U) MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: Project X2221, Assessment Program, provides analytical and management support to the Planning segment of the Navy Planning, Programming and Budgeting System (PPBS). This project supports the development of annual Integrated Warfare Architectures (IWARs) and Chief of Naval Operations Program Analysis Memoranda (CPAM) assessments, which provide analytical underpinnings/basis for programmatic decisions of the Navy's top leadership regarding the integration of all Navy warfare and support requirements. This program provides the Navy input to the Vice Chairman Joint Chiefs of Staff (VCJCS) led Joint Warfighting Capability Assessment (JWCA) process. Assessment program develops tools and analytical methodologies that assist in evaluating Navy programs and provides technical leadership for the analysis functional area of Naval Modeling and Simulation.</p> <p>(U) PROGRAM ACCOMPLISHMENTS AND PLAN:</p> <p>(U) FY 2001 ACCOMPLISHMENTS:</p> <ul style="list-style-type: none"> - (U) (\$0.212) Developed, updated and maintained detailed level Navy Standard scenarios based on Defense Planning Guidance. - (U) (\$9.293) Developed Integrated Warfare Architectures (IWARs) and performed assessments and developed the Chief of Naval Operations Program Analysis Memoranda (CPAM). Areas of focus included Air Dominance; Deterrence; Force Structure; Infrastructure; Manpower and Personnel; Training and Education; Power Projection; Readiness; Sea Dominance; Sensor Management/Information Superiority; Sustainment; Technology. Provided Navy input to Joint Warfighting Capabilities Assessment (JWCA) process. - (U) (\$2.062) Continued to develop and accredit IWAR and CPAM tool and improve analytic methodology. - (U) (\$1.692) Using the standard simulation and database architecture developed by Navy Modeling and Simulation to re-host legacy models into the new framework, vastly improved the utility of these tools to the assessment process. Developed new tools that utilize models in the standard simulation and database architecture. Coordinated/support Joint Analytical Model Improvement Program (JAMIP). - (U) (\$0.960) In response to ASN (RD&A)'s request, developed the Resource Allocation Decision Support System (RADSS) into a fully operational decision support system for use across Department of the Navy (DON) Expanded the scope of the database and developed a fully operational, web-based RADSS that provides ASN (RD&A) and OPNAV with analytical and management tools for the planning/assessment process. 										

R-1 SHOPPING LIST - Item No.158-12 of 158-13

Exhibit R-2a, RDT&E Budget Item Justification
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CLASSIFICATION:

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EXHIBIT R-2a, RDT&E Budget Item Justification		DATE: February 2002
APPROPRIATION/BUDGET ACTIVITY RDT&E, N BA-6	PROGRAM ELEMENT NUMBER AND NAME 0605853N/Management, Technical and International Spt	PROJECT NUMBER AND NAME X2221 Assessment Program
<p>(U) FY 2002 PLAN:</p> <ul style="list-style-type: none"> - (U) (\$0.218) Develop, update and maintain detailed level Navy Standard scenarios based on Defense Planning Guidance. Develop of Alternative Scenarios in Support of QDR, Joint Studies, and Navy Resource Analyses. - (U) (\$7.991) Continued Integrated Warfare Architectures (IWARs) support and perform assessments and develop the Chief of Naval Operations Program Analysis Memoranda (CPAM). Areas of focus include Air Dominance; Deterrence; Force Structure; Infrastructure; Manpower and Personnel; Training and Education; Power Projection; Readiness; Sea Dominance; Sensor Management/Information Superiority; Sustainment; Technology. Provide Navy input to Joint Warfighting Capabilities Assessment (JWCA) and Joint Requirement Oversight Council (JROC) processes. - (U) (\$1.805) Continue to develop and accredit IWAR and CPAM tool and improve analytic methodology. Continued support for Alternatives of Analysis (AOA) Support and Oversight. Support for the Chairman's Program Recommendation (CPR) and Chairman's Program Assessment (CPA). - (U) (\$1.482) Using the standard simulation and database architecture developed by Navy Modeling and Simulation to re-host legacy models into the new framework, vastly improving the utility of these tools to the assessment process. Continue to develop new tools that utilize models in the standard simulation and database architecture. Coordinate/support Joint Analytical Model Improvement Program (JAMIP). <p>(U) FY 2003 PLAN:</p> <ul style="list-style-type: none"> - (U) (\$0.225) Continue to develop and maintain detailed level Navy Standard scenarios based on Defense Planning Guidance. Develop and evaluate alternative scenarios. - (U) (\$8.764) Supports Integrated Warfare Architecture (IWARs) and perform assessments and develop the Chief of Naval Operations Program Analysis Memoranda (CPAM). Areas of focus include Air Dominance; Force Structure; Infrastructure; Manpower and Personnel; Training and Education; Power Projection; Readiness; Sea Dominance; Sensor Management/Information Interoperability key performer parameters. Provide Navy input to Joint Warfighting Capabilities Assessment and Joint Requirement Oversight Council (JROC) (JWCA) processes. - (U) (\$2.188) Continue to develop and accredit IWAR and CPAM tool and improve analytic methodology. - (U) (\$1.623) Applying the standard simulation and database architecture developed by Navy Modeling and Simulation to re-host legacy models into the new framework, vastly improving the utility of these tools to the assessment process. Continue to develop new tools that utilize Models in the standard simulation and database architecture. Coordinate/support Joint Analytical Model Improvement Program (JAMIP). <p>B. (U) OTHER PROGRAM FUNDING SUMMARY: Not Applicable</p> <p>C. (U) ACQUISITION STRATEGY: Not Applicable</p> <p>D. (U) SCHEDULE PROFILE: Not Applicable</p>		

R-1 SHOPPING LIST - Item No.158-13 of 158-13

Exhibit R-2a, RDT&E Budget Item Justification
(Exhibit R-2a, page 13 of 13)

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FY 2003 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET

DATE: February 2002

BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605861N

PROGRAM ELEMENT TITLE: RDT&E,N Science and Technology Management

(U) COST: (Dollars in Thousands)

PROJECT NUMBER & TITLE	FY 2001 ESTIMATE	FY 2002 ESTIMATE	FY 2003 ESTIMATE	FY 2004 ESTIMATE	FY 2005 ESTIMATE	FY 2006 ESTIMATE	FY 2007 ESTIMATE	TO COMPLETE	TOTAL PROGRAM
R0135 ONR Science and Technology Management	51,169	50,343	55,442	55,406	57,480	59,011	60,888	CONT.	CONT.
R0137 ONR S&T Instrumentation Modernization	1,208	1,068	1,012	1,066	1,119	1,016	1,045	CONT.	CONT.
R2353 DFAS Billings	2,879	2,929	2,993	3,059	3,116	3,178	3,240	CONT.	CONT.
TOTAL	55,256	54,340	59,447	59,531	61,715	63,205	65,173	CONT.	CONT.

A. (U) MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: This program element covers Office of Naval Research (ONR) expenses including salaries, utilities, printing, supplies, materials, information technology (IT), general support equipment and other day-to-day costs. The vast majority of these items represent fixed costs associated with scientists and engineers supporting the Navy's Science and Technology Program. The Defense Finance and Accounting Service (DFAS) Billing project provides funds for accounting services provided to Research and Development (R&D) activities.

(U) JUSTIFICATION FOR BUDGET ACTIVITY: This program is funded under RDT&E MANAGEMENT SUPPORT because it supports the operations and installations required for general research and development use.

R-1 Line Item 160

Budget Item Justification
(Exhibit R-2, page 1 of 8)

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FY 2003 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET

DATE: February 2002

BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605861N

PROGRAM ELEMENT TITLE: RDT&E,N Science and Technology Management

B. (U) PROGRAM CHANGE FOR TOTAL P.E.:

	FY 2001	FY 2002	FY 2003
FY 2002 President's Budget	52,877	54,825	
SBIR	-33	0	
Execution Adjustment	2,412	0	
Section 8123 Management Reform Initiative Reduction	0	-485	
FY 2003 President's Budget	55,256	54,340	59,447

R-1 Line Item 160

Budget Item Justification
(Exhibit R-2, page 2 of 8)

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FY 2003 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET

DATE: February 2002

BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605861N

PROGRAM ELEMENT TITLE: RDT&E,N Science and Technology Management

(U) (COST): (Dollars in Thousands)

PROJECT NUMBER & TITLE	FY 2001 ESTIMATE	FY 2002 ESTIMATE	FY 2003 ESTIMATE	FY 2004 ESTIMATE	FY 2005 ESTIMATE	FY 2006 ESTIMATE	FY 2007 ESTIMATE	TO COMPLETE	TOTAL PROGRAM
R0135 ONR Science and Technology Management	51,169	50,343	55,442	55,406	57,480	59,011	60,888	CONT.	CONT.

A. (U) MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: This project supports Office of Naval Research (ONR) leadership, management and direction for the Naval Science and Technology program. This project funds salaries, utilities, supplies, and other fixed costs at ONR Headquarters and field offices. ONR sponsors scientific advances, which lead to future Naval capabilities, supporting the fleet's ability to operate from a position of technological superiority. Functions performed include (1) scientific and technical direction of the nationwide 6.1 basic research program with colleges, universities, non-profits and Navy laboratories and warfare centers; (2) scientific and technical direction of the 6.2 applied research program through the Naval R&D laboratories and warfare centers and industry; (3) scientific and technical direction of the Naval 6.3 advanced technology development program through the Navy's R&D laboratories, warfare centers and industry; (4) management, resource formulation, program assessment, and contract negotiation/administration of the Navy basic research, applied research and advanced technology development program; (5) program management and support to selected research programs of Missile Defense Agency (MDA) and Defense Advanced Research Projects Agency (DARPA); and (6) coordination of the Navy's Technology Base program within the context of total DoD/Government (e.g., National Science Foundation, National Academy of Sciences) R&D initiatives in order to maximize scientific advances. This project also supports ONR management and direction for the following Navy-wide programs: Small Business Innovation Research (SBIR), Naval Research Advisory Committee, Navy Patent Program, Navy Historically Black Colleges and Universities Program, Navy Manufacturing Technology Program and the SSBN Security Program. In addition, this program supports ONR's Navy-wide responsibilities in the negotiation and establishment of indirect cost rates for DoD-assigned universities and performance of contract administration for all DoD contacts/grants at all colleges and universities.

(U) PROGRAM ACCOMPLISHMENTS AND PLANS

1. (U) FY 2001 ACCOMPLISHMENTS:

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Budget Item Justification
(Exhibit R-2, page 3 of 8)

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FY 2003 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET

DATE: February 2002

BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605861N

PROJECT NUMBER: R0135

PROGRAM ELEMENT TITLE: RDT&E,N Science & Technology
Management

PROJECT TITLE: ONR Science & Technology
Management

- (U) (51,169) The project continued to provide for basic costs of the ONR headquarters and its field activities in support of the entire Navy Science and Technology program. Almost all the funds in this project are fixed costs, such as salaries, communications, etc. The project continued to provide support for the ONR headquarters and field offices. Specifically, it paid the salaries of scientific and engineering personnel who directed the execution of the Navy's basic research, applied research, and advanced technology development programs at the nation's universities/colleges, Navy laboratories and warfare centers, and private industry. In addition to its Navy Science and Technology mission, ONR provided important management and administrative support to MDA and DARPA.

2. (U) FY 2002 PLAN:

- (U) (50,343) The project continues to provide for basic costs of the ONR headquarters and its field activities in support of the entire Navy Science and Technology program. Almost all the funds in this project are fixed costs, such as salaries, communications, etc. The project continues to provide support for the ONR headquarters and field offices. Specifically, it pays the salaries of scientific and engineering personnel who direct the execution of the Navy's basic research, applied research, and advanced technology development programs at the nation's universities/colleges, Navy laboratories and warfare centers, and private industry. In addition to its Navy Science and Technology mission, ONR provides important management and administrative support to MDA and DARPA.

3. (U) FY 2003 PLAN:

- (U) (55,442) The project continues to provide for basic costs of the ONR headquarters and its field activities in support of the entire Navy Science and Technology program. Almost all the funds in this project are fixed costs, such as salaries, communications, etc. The project continues to provide support for the ONR headquarters and field offices. Specifically, it pays the salaries of scientific and engineering personnel who direct the execution of the Navy's basic research, applied research, and advanced technology development programs at the nation's universities/colleges, Navy laboratories and warfare centers, and private industry. In addition to its Navy Science and Technology mission, ONR provides important management and administrative support to MDA and DARPA.

B. (U) OTHER PROGRAM FUNDING SUMMARY: Not applicable.

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Budget Item Justification
(Exhibit R-2, page 4 of 8)

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FY 2003 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET

DATE: February 2002

BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605861N

PROJECT NUMBER: R0135

PROGRAM ELEMENT TITLE: RDT&E,N Science & Technology
Management

PROJECT TITLE: ONR Science & Technology
Management

C. (U) ACQUISITION STRATEGY: Not applicable.

D. (U) SCHEDULE PROFILE: Not applicable.

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Budget Item Justification
(Exhibit R-2, page 5 of 8)

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FY 2003 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET

DATE: February 2002

BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605861N

PROGRAM ELEMENT TITLE: RDT&E,N Science & Technology Management

(U) COST: (Dollars in Thousands)

PROJECT NUMBER & TITLE	FY 20001 ESTIMATE	FY 2002 ESTIMATE	FY 2003 ESTIMATE	FY 2004 ESTIMATE	FY 2005 ESTIMATE	FY 2006 ESTIMATE	FY 2007 ESTIMATE	TO COMPLETE	TOTAL PROGRAM
R0137 ONR S&T Instrumentation Modernization	1,208	1,068	1,012	1,066	1,119	1,016	1,045	CONT.	CONT.

A. (U) MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: This project purchases information technology (IT) and general support equipment for the Office of Naval Research (ONR) headquarters and field offices.

(U) PROGRAM ACCOMPLISHMENTS AND PLANS:

1. (U) FY 2001 ACCOMPLISHMENTS:

- (U) (1,208) Purchased IT and general support equipment for ONR headquarters and field offices.

2. (U) FY 2002 PLAN:

- (U) (1,068) Purchase IT and general support equipment for ONR headquarters and field offices.

3. (U) FY 2003 PLAN:

- (U) (1,012) Purchase IT and general support equipment for ONR headquarters and field offices.

B. (U) OTHER PROGRAM FUNDING SUMMARY: Not applicable.

C. (U) ACQUISITION STRATEGY: Not applicable.

D. (U) SCHEDULE PROFILE: Not applicable.

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Budget Item Justification
(Exhibit R-2, page 6 of 8)

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FY 2003 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET

DATE: February 2002

BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605861N

PROGRAM ELEMENT TITLE: RDT&E,N Science and Technology Management

(U) COST: (Dollars in Thousands)

PROJECT NUMBER & TITLE	FY 2001 ESTIMATE	FY 2002 ESTIMATE	FY 2003 ESTIMATE	FY 2004 ESTIMATE	FY 2005 ESTIMATE	FY 2006 ESTIMATE	FY 2007 ESTIMATE	TO COMPLETE	TOTAL PROGRAM
R2353 DFAS Billings	2,879	2,929	2,993	3,059	3,116	3,178	3,240	CONT.	CONT.

A. (U) MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: This project provides funding for accounting services provided to Research and Development (R&D) activities by the Defense Finance and Accounting Service (DFAS).

(U) PROGRAM ACCOMPLISHMENTS AND PLANS:

1. (U) FY 2001 ACCOMPLISHMENTS:

- (U) (2,879) Funded DFAS bill for transactions processed in support of Department of the Navy R&D activities. Specific services included pay, transportation, commercial invoices, travel, and the maintenance of trial balances.

2. (U) FY 2002 PLAN:

- (U) (2,929) Funds DFAS bill for transactions processed in support of Department of the Navy R&D activities. Specific services include pay, transportation, commercial invoices, travel, and the maintenance of trial balances.

3. (U) FY 2003 PLAN:

- (U) (2,993) Funds DFAS bill for transactions processed in support of Department of the Navy R&D activities. Specific services include pay, transportation, commercial invoices, travel, and the maintenance of trial balances.

B. (U) OTHER PROGRAM FUNDING SUMMARY: Not Applicable.

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Budget Item Justification
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FY 2003 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET

DATE: February 2002

BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605861N

PROJECT NUMBER: R2353

PROGRAM ELEMENT TITLE: RDT&E,N Science and Technology
Management

PROJECT TITLE: DFAS Billings

C. (U) ACQUISITION STRATEGY: Not Applicable.

D. (U) SCHEDULE PROFILE: Not applicable.

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Budget Item Justification
(Exhibit R-2, page 8 of 8)

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FY 2002 / 2003 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET

DATE: February 2002

BUDGET ACTIVITY: 6 PROGRAM ELEMENT: 0605862N

PROGRAM ELEMENT TITLE: RDT&E Medical Science and
Technology Management and
Instrumentation Modernization

PROJECT NUMBER:

PROJECT TITLE:

(U) COST: (Dollars in Thousands)

PROJECT NUMBER & TITLE	FY 2001 ESTIMATE	FY 2002 ESTIMATE	FY 2003 ESTIMATE	FY 2004 ESTIMATE	FY 2005 ESTIMATE	FY 2006 ESTIMATE	FY 2007 ESTIMATE	TO COMPLETE	TOTAL PROGRAM
M0104 RDT&E Medical Science and Technology Management and Instrumentation Modernization									
	14,352	13,382	12,302	13,392	14,216	14,580	14,956		
M3037 Medical Force Protection									
	0	0	987	1,030	1,072	1,111	1,154		
Total	14,352	13,382	13,289	14,422	15,288	15,691	16,110		
Non-Add DERF 0	0	0	925	47	47	47	47		

A. (U) MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: This program element includes RDT&E funds for operating and miscellaneous support costs at RDT&E laboratories and other installations, facility and civilian personnel costs not directly chargeable to RDT&E projects. Also includes RDT&E funds for RDT&E laboratories and facilities for research, support, equipment, minor construction and other investment and materiel support costs not directly chargeable to RDT&E projects. Excludes military manpower and related costs, non-RDT&E base operating costs, and military construction costs which are included in other appropriate programs.

B. (U) PROGRAM CHANGE SUMMARY:

	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>
(U) President's Budget:	12,045	10,101	12,302	13,992	14,216	14580	14,956
(U) Adjustments from FY 2001 PRESBUDG	2,307	3,281	0	0	0	0	0
(U) FY 2002 / 2003 President's Submission	14,352	13,382	13,289	14,422	15,288	15,691	16,110

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FY 2002 / 2003 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET

DATE: February 2002

BUDGET ACTIVITY: 6 PROGRAM ELEMENT: 0605862N
PROGRAM ELEMENT TITLE: RDT&E Medical Science and
Technology Management and
Instrumentation Modernization

PROJECT NUMBER:
PROJECT TITLE:

(U) CHANGE SUMMARY EXPLANATION:

(U) Funding:

(U) FY 2001: decrease of (-84) for Section 8086: .7% Pro-Rate Reduction, decrease of (-26) for government-wide recession, decrease of (-23) for SBIR increase of (1,640) for Force Protection

(U) FY 2002:increase of (1,900) for Force Protection, increase of (1,500) for Readiness and Training, decrease of (-119) Section 8123:Management Refo

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FY 2002 / 2003 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET

DATE: February 2002

BUDGET ACTIVITY: 6 PROGRAM ELEMENT: 0605862N

PROGRAM ELEMENT TITLE: RDT&E Medical Science and
Technology Management and
Instrumentation Modernization

PROJECT NUMBER:

PROJECT TITLE:

(U) COST: (Dollars in Thousands)

PROJECT NUMBER & TITLE	FY 2001 ESTIMATE	FY 2002 ESTIMATE	FY 2003 ESTIMATE	FY 2004 ESTIMATE	FY 2005 ESTIMATE	FY 2006 ESTIMATE	FY 2007 ESTIMATE	TO COMPLETE	TOTAL PROGRAM
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M0104 RDT&E Medical Science and Technology Management and Instrumentation Modernization

	14,352	13,382	12,302	13,392	14,216	14,580	14,956		
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A. (U) MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: This program element includes RDT&E funds for operating and miscellaneous support costs at RDT&E laboratories and other installations, facility and civilian personnel costs not directly chargeable to RDT&E projects. Also includes RDT&E funds for RDT&E laboratories and facilities for research, support, equipment, minor construction and other investment and materiel support costs not directly chargeable to RDT&E projects. Excludes military manpower and related costs, non-RDT&E base operating costs, and military construction costs which are included in other appropriate programs.

(U) PROGRAM ACCOMPLISHMENT AND PLANS:

1. (U) FY 2001 ACCOMPLISHMENTS:

- (U) (\$14,352) Provided operating and miscellaneous support costs at BUMED and its research laboratories. Support included (2,353) for facilities and (\$9,559) for operating and support costs.

2. (U) FY 2002 PLAN:

- (U) (\$13,382) Continue to provide operating and miscellaneous support costs at BUMED and its research laboratories. Continue to provide support for technologically advanced cutting edge research equipment for research and data acquisition, automated sampling and real time statistical analysis of biomedical research data utilizing data information systems integral with new equipment. Continue to provide replacement of obsolescent research equipment. Continue to provide support to physical facility areas needing major repair, minor construction, rehabilitation to meet mission requirements as well as meeting environmental compliance and pollution standards.

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FY 2002 / 2003 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET

DATE: February 2002

BUDGET ACTIVITY: 6 PROGRAM ELEMENT: 0605862N
PROGRAM ELEMENT TITLE: RDT&E Medical Science and
Technology Management and
Instrumentation Modernization

PROJECT NUMBER:
PROJECT TITLE:

3. (U) FY 2003 PLAN:

- (U) (\$12,302) Continue to provide operating and miscellaneous support costs at BUMED and its research laboratories. Continue to provide support for technologically advanced equipment for research and data acquisition, automated sampling and real time statistical analysis of biomedical research data utilizing data information systems integral with new equipment. Continue to provide replacement of obsolescent research equipment. Continue to provide support to physical facility areas needing major repairs, replacement, minor construction, rehabilitation to meet mission requirements and environmental compliance and pollution standards.

B. (U) OTHER PROGRAM FUNDING SUMMARY: Not applicable.

(U) RELATED RDT&E: Not applicable

C. (U) SCHEDULE PROFILE: Not applicable.

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FY 2002 / 2003 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET

DATE: February 2002

BUDGET ACTIVITY: 6 PROGRAM ELEMENT: 0605862N PROJECT NUMBER:
 PROGRAM ELEMENT TITLE: RDT&E Medical Science and PROJECT TITLE:
 Technology Management and
 Instrumentation Modernization

(U) COST: (Dollars in Thousands)

PROJECT NUMBER & TITLE	FY 2001 ESTIMATE	FY 2002 ESTIMATE	FY 2003 ESTIMATE	FY 2004 ESTIMATE	FY 2005 ESTIMATE	FY 2006 ESTIMATE	FY 2007 ESTIMATE	TO COMPLETE	TOTAL PROGRAM
M3037 Medical Force Protection									
	0	0	987	1,030	1,072	1,111	1,154		
Non-Add DERF	0	0	925	47	47	47	47		

Note: FY 2001 (\$1,640) and FY 2002 (\$1,900) Force Protection Funds were received in this Program Element under project M0104.

A. (U) MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: This project includes RDT&E,N funds for Force Protection Requirements at BUMED RDT&E,N laboratories

(U) PROGRAM ACCOMPLISHMENT AND PLANS:

1. (U) FY 2003 PLAN:

- (U) (987) Continue to provide funds for Force Protection Requirements at BUMED RDT&E,N research laboratories.

B. (U) OTHER PROGRAM FUNDING SUMMARY: Not applicable.

(U) RELATED RDT&E: Not applicable

C. (U) SCHEDULE PROFILE: Not applicable.

UNCLASSIFIED

CLASSIFICATION:

EXHIBIT R-2, RDT&E Budget Item Justification								DATE: February 2002			
APPROPRIATION/BUDGET ACTIVITY RESEARCH DEVELOPMENT TEST & EVALUATION, NAVY / BA-6						R-1 ITEM NOMENCLATURE 0605863N - RDT&E,N Ship and Aircraft Support					
COST (\$ in Millions)	Prior Year Cost		FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	Cost to Complete	Total Program
Total PE Cost			75.754	71.101	71.519	76.900	84.016	81.431	83.604	Continuing	Continuing
S0354 RDT&E Ships Support			17.004	10.114	10.383	10.548	11.807	11.146	11.110	Continuing	Continuing
S2924 RDT&E Self-Defense Test Ship				3.272	3.199	3.042	2.871	3.233	5.090	Continuing	Continuing
W0568 RDT&E Aircraft Flight Hours			27.385	29.131	28.397	29.446	29.927	31.471	31.158	Continuing	Continuing
W0569 RDT&E Aircraft Support			31.365	28.584	29.540	33.864	39.411	35.581	36.246	Continuing	Continuing
Quantity of RDT&E Articles	Not Applicable										
(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: This continuing program provides support for ships and platforms required to accommodate Research, Development, Test and Evaluation (RDT&E) of new systems. The RDT&E ship and aircraft inventory is required to adequately test new and improved weapon systems, stay current with threats, and increase warfighting capability of the fleet. The program provides integrated logistics support for aircraft at selected field activities; provides depot-level rework of aircraft, engines, and components for the Navy inventory of RDT&E aircraft; and provides support for ships and aircraft bailed to contractors for Navy RDT&E projects. Costs covered under this element include aircrew training and proficiency, fuel, supplies, equipment, modification, repair, Aviation Depot Level Repairables, Special Flight Test Instrumentation Pool equipment, overhaul of ships and aircraft, as well as organizational, intermediate, and depot maintenance of ships and aircraft in the Navy RDT&E inventory.											
(U) JUSTIFICATION FOR BUDGET ACTIVITY: This program is funded under RDT&E MANAGEMENT SUPPORT because it supports the operations and installations required for general research and development use.											

R-1 SHOPPING LIST - Item No. 162

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Exhibit R-2, RDTEN Budget Item Justification
(Exhibit R-2, page 1 of 19)

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification								DATE: February 2002			
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6		PROGRAM ELEMENT NUMBER AND NAME 0605863N - RDT&E,N Ship and Aircraft Support				PROJECT NUMBER AND NAME S0354 - RDT&E Ships Support					
COST (\$ in Millions)	Prior Year Cost		FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	Cost to Complete	Total Program
Project Cost			17.004	10.114	10.383	10.548	11.807	11.146	11.110	Continuing	Continuing
RDT&E Articles Qty											

(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

(U) S0354, RDT&E Ships Support. This project provides for operation and maintenance of platforms used as Sea Based Test Sites in support of the Navy Research, Development, Test and Evaluation (RDT&E) program. These are the USS DOLPHIN (AGSS-555) and the Self-Defense Test Ship (SDTS). Testing aboard these platforms reduces the number of fleet units required to support RDT&E efforts. In the case of the SDTS, it provides the capability of testing self-defense weapons systems to within their minimum ranges. A major cost of this project is regularly scheduled ship maintenance. The remainder of the funds are used for purchase of supplies and equipment, fuel and petroleum products, repairs, and supporting modifications. Most costs are fixed and are associated with simply having these platforms in the inventory. A lesser portion of the costs varies with the tempo and type of ship operations and provides for systems improvements and replacement planning. The nature of the operation is determined by the overall Navy/DoD R&D testing program.

(U) USS DOLPHIN will support software upgrades testing of the MK50 and MK48 Advanced Capability (ADCAP) torpedoes, the New SSN (Fast Attack Submarine, Virginia Class) (NSSN) Material Qualification Program, ONR Littoral Warfare Advanced Development (LWAD) Program, Improved Extended Echo Ranging (IEER), Advanced Extended Echo Ranging (AEER), Advanced Deployable System (ADS), Submarine Mast Detection Radar (SMDR), Laser Airborne System - Hyperspectral (LASH), Airborne Low Frequency Sonar (ALFS), Tripartied Technology Cooperation Program (TTCP) and the Advanced Sea/Air/Land (SEAL) Delivery Program. Mobile Inshore Warfare Unit Arrays and the Seabased Weapons and Tactics School (SWATS) are also frequently supported by USS DOLPHIN. USS DOLPHIN provides support for numerous undersea surveillance, sonar, weapons, communications and imaging programs.

(U) The current and projected Anti-Ship Cruise Missile (ASCM) threats require self-defense weapons systems capable of adequately countering ASCMs into the year 2001 and beyond. The National Defense Authorizations Act for FY87, section 910, "Testing of Certain Weapons Systems and Munitions," requires live-fire lethality testing of manned weapons systems. Operational and safety constraints limit realistic live-fire lethality testing with U.S. Navy ships and thus drive the requirement for having an afloat, unmanned, remotely controlled SDTS. SDTS plans call for testing PHALANX, High Frequency Surface Wave Radar Advanced Technology Demonstration (ATD), the Rolling Airframe Missile (RAM) and future short range Anti-Air Warfare systems against realistic threat presentation in an at-sea environment.

(U) PROGRAM ACCOMPLISHMENTS AND PLANS:

1. FY 2001 ACCOMPLISHMENTS:

- (U) (\$14.586) USS DOLPHIN completed RAV 3-5 in April 2001, underwent a full SUBSAFE certification and received authorization to conduct unrestricted operations. DOD REP modifications are partially complete and will continue to be tested at sea until completed in Dec 01. USS DOLPHIN supported DT&E and OT&E testing of the LWAD, MK54 lightweight torpedo, AEER, ALFS, and ADS programs. USS DOLPHIN supported near ocean bottom operations, torpedo exercises, fleet exercises and RDT&E programs modeling sonar propagation, testing sensors and communication systems. In addition, USS DOLPHIN conducted periodic phased maintenance to maintain certification and procure material to support continued operations.
- (U) (\$2.418) Ex-DECATUR/SDTS conducted live fire operations at NAVAIRWARCENWPNDIV Point Mugu, CA. NAVSURFWARCENDIV Port Hueneme CA planned, scheduled, and performed combat systems operations and maintenance on board Self-Defense Test Ship (SDTS)

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Exhibit R-2, RDTE Budget Item Justification
(Exhibit R-2, page 2 of 19)

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2002
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6	PROGRAM ELEMENT NUMBER AND NAME 0605863N - RDT&E Ship and Aircraft Support	PROJECT NUMBER AND NAME S0354 - RDT&E Ships Support
<p>2. FY 2002 PLANS:</p> <p>- (U) (\$10.114) USS DOLPHIN plans on supporting DT&E and OT&E testing of the LWAD, MK48 ADCAP, and MK54 torpedoes, AEER, ALFS, SWAT and ADS programs. DT&E testing of the RADIANT BRONZE project for Tactical Exploitation of National Capabilities (TENCAP) will continue. DOLPHIN will continue to support near ocean bottom operations, torpedo exercises and RDT&E programs modeling sonar propagation, testing sensors and communication systems. In addition, USS DOLPHIN conducts periodic phased maintenance to maintain certification and procures material to support continued operations. Restricted Availability (RAV) 1-6 begins JULY 02.</p> <p>3. FY 2003 PLANS:</p> <p>- (U) (\$10.383) USS DOLPHIN is scheduled to complete RAV1-6 in October 2002. USS DOLPHIN plans on supporting DT&E and OT&E testing of the LWAD, MK48 ADCAP, and MK54 torpedoes, AEER, ALFS, SWAT and ADS programs. DT&E testing of the RADIANT BRONZE project for Tactical Exploitation of National Capabilities (TENCAP) will continue. DOLPHIN will continue to support near ocean bottom operations, torpedo exercises and RDT&E programs modeling sonar propagation, testing sensors and communication systems. In addition, USS DOLPHIN conducts periodic phased maintenance to maintain certification and procures material to support continued operations.</p>		

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Exhibit R-2, RD TEN Budget Item Justification
(Exhibit R-2, page 3 of 19)

UNCLASSIFIED

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2002																
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6	PROGRAM ELEMENT NUMBER AND NAME 0605863N - RDT&E Ship and Aircraft Support	PROJECT NUMBER AND NAME S0354 - RDT&E Ships Support																
<p>(U) B. PROGRAM CHANGE SUMMARY: (Show total funding, schedule, and technical changes for the program element that have occurred since the last President's submission.</p> <table style="width: 100%; border-collapse: collapse;"><thead><tr><th></th><th style="text-align: right;">FY2001</th><th style="text-align: right;">FY2002</th><th style="text-align: right;">FY2003</th></tr></thead><tbody><tr><td>(U) FY 2002 President's Budget:</td><td style="text-align: right;">15.604</td><td style="text-align: right;">10.204</td><td></td></tr><tr><td>(U) Adjustments from the FY2002 President's Budget:</td><td style="text-align: right;">1.4</td><td style="text-align: right;">-0.09</td><td></td></tr><tr><td>(U) FY 2003 President's Budget:</td><td style="text-align: right;">17.004</td><td style="text-align: right;">10.114</td><td style="text-align: right;">10.383</td></tr></tbody></table> <p>CHANGE SUMMARY EXPLANATION:</p> <p>(U) Funding: The FY2001 net increase of \$1.400 million includes a \$1.500 million increase from an ASN/FMB midyear BTR because of a cost growth during RAV 3-5, a \$.061 million decrease for a Small Business Innovative Research Assessment, and a \$.039 million reduction for cancelled accounts.</p> <p>The FY2002 net decrease of \$0.09 million is for an undistributed congressional reduction.</p> <p>(U) Schedule: Not applicable.</p> <p>(U) Technical: Not applicable.</p> <p>(U) C. OTHER PROGRAM FUNDING SUMMARY: Not applicable.</p> <p>(U) D. ACQUISITION STRATEGY: Not applicable.</p> <p>(U) E. SCHEDULE PROFILE: Not applicable.</p>				FY2001	FY2002	FY2003	(U) FY 2002 President's Budget:	15.604	10.204		(U) Adjustments from the FY2002 President's Budget:	1.4	-0.09		(U) FY 2003 President's Budget:	17.004	10.114	10.383
	FY2001	FY2002	FY2003															
(U) FY 2002 President's Budget:	15.604	10.204																
(U) Adjustments from the FY2002 President's Budget:	1.4	-0.09																
(U) FY 2003 President's Budget:	17.004	10.114	10.383															

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Exhibit R-2, RD TEN Budget Item Justification
(Exhibit R-2, page 4 of 19)

UNCLASSIFIED

CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 1)								DATE: February 2002				
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NUMBER AND NAME						
RDT&E, N / BA-6			0605863N - RDT&E Ship and Aircraft Support			S0354 - RDT&E Ships Support						
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 01 Cost	FY 01 Award Date	FY 02 Cost	FY 02 Award Date	FY 03 Cost	FY 03 Award Date	Cost to Complete	Total Cost	Target Value of Contract
RAV	WR	Portsmouth Naval Shipyard	26.786	9.441	10/00	6.099	10/01	6.206	10/02	Continuing	Continuing	
PY Support	WR	Portsmouth Naval Shipyard	5.282	2.520	10/00	1.995	10/01	2.052	10/02	Continuing	Continuing	
SDTS	WR	Port Hueneme	8.904	2.213	10/00					Continuing	Continuing	
Maintenance/Home Porting	WR/RCP	SPAWAR	4.488	1.275	10/00	1.097	10/01	1.126	10/02	Continuing	Continuing	
Misc (Less than \$1M -aggregate)	WR	Various	6.206	1.555	10/00	0.923	10/01	0.999	10/02	Continuing	Continuing	
Subtotal Product Development			51.666	17.004		10.114		10.383		Continuing	Continuing	
<p>Remarks: This program has existed since 1968. The program management responsibilities were transferred to this office June 1997. Detailed execution data is not available prior to that date. The total prior year costs reflect execution data from FY97 through FY00.</p> <p>The Self-Defense Test Ship (SDTS) program was incorporated under CLI S2924 in FY02.</p>												
Subtotal Support												
<p>Remarks:</p>												

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Exhibit R-2, RDTEB Budget Item Justification
(Exhibit R-2, page 5 of 19)

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CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 2)										DATE: February 2002			
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6			PROGRAM ELEMENT 0605863N - RDT&E Ship and Aircraft Support			PROJECT NUMBER AND NAME S0354 - RDT&E Ships Support							
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 01 Cost	FY 01 Award Date	FY 02 Cost	FY 02 Award Date	FY 03 Cost	FY 03 Award Date	Cost to Complete	Total Cost	Target Value of Contract	
Subtotal T&E													
Remarks:													
Subtotal Management													
Remarks:													
Total Cost			51.666	17.004		10.114		10.383		Continuing	Continuing		
Remarks:													

R-1 SHOPPING LIST - Item No. 162

UNCLASSIFIED

Exhibit R-2, RDTE Budget Item Justification
(Exhibit R-2, page 6 of 19)

UNCLASSIFIED

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification								DATE: February 2002			
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6		PROGRAM ELEMENT NUMBER AND NAME 0605863N - RDT&E,N Ship and Aircraft Support				PROJECT NUMBER AND NAME S2924 - RDT&E Self-Defense Test Ship					
COST (\$ in Millions)	Prior Year Cost		FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	Cost to Complete	Total Program
Project Cost				3.272	3.199	3.042	2.871	3.233	5.090	Continuing	Continuing
RDT&E Articles Qty											

(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

(U) This project provides for the maintenance of Hull Mechanical and Electrical (HM&E) systems of the Self-Defense Test Ship (SDTS) in support of the Navy Research, Development, Test and Evaluation (RDT&E) of ship self-defense systems. Testing aboard this ship reduces the number of fleet units required to support RDT&E efforts. SDTS provides the capability of testing self-defense weapon systems within their minimum range. A major cost of this project is regularly scheduled ship maintenance. The remainder of the funds are used for purchase of supplies and equipment, fuel and petroleum products, repairs and supporting services. Most costs are fixed and are associated with simply having this platform in the inventory.

(U) Current and projected Anti-Ship Cruise Missile (ASCM) threats require self-defense weapons systems capable of adequately countering ASCMs into the year 2001 and beyond. The National Defense Authorization Act for FY87, section 910, "Testing of Certain Weapons Systems and Munitions," requires live-fire lethality testing of manned weapons systems. Operational and safety constraints limit realistic live-fire lethality testing with U.S. Navy ships and thus drive the requirement for having an afloat, unmanned, remotely controlled SDTS. SDTS plans call for testing PHALANX, Evolved Sea Sparrow Missile (ESSM), High Frequency Surface Wave Radar Advanced Technology Demonstration (ATD), the Rolling Airframe Missile (RAM), and future short-range Anti-Air Warfare systems against realistic threat presentation in an at-sea environment.

(U) PROGRAM ACCOMPLISHMENTS AND PLANS:

1. FY 2002 PLANS:

- (U) (\$3.272) SDTS will conduct live fire operations at NAVAIRWARCENWPNDIV Point Mugu, CA. Life fire testing will include the RAM Helo Anti-Surface mode and the ESSM. NAVSURFWARCENDIV Port Hueneme CA will plan, schedule, and perform HM&E maintenance onboard SDTS in support of Long Pulse High Power Microwaves (HPM) System testing.

2. FY2003 PLANS:

-(U) (\$3.199) SDTS will conduct live fire operations at NAVAIRWARCENWPNDIV Point Mugu, CA. Life fire testing will include the RAM Helo Anti-Surface mode and the ESSM. NAVSURFWARCENDIV Port Hueneme CA will plan, schedule, and perform HM&E maintenance onboard SDTS in support of Long Pulse High Power Microwaves (HPM) System testing.

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2002
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6	PROGRAM ELEMENT NUMBER AND NAME 0605863N - RDT&E Ship and Aircraft Support	PROJECT NUMBER AND NAME S2924 - RDT&E Self-Defense Test Ship

(U) B. PROGRAM CHANGE SUMMARY:

	FY2001	FY2002	FY2003
(U) FY 2002 President's Budget:		3.301	
(U) Adjustments from the FY2002 President's Budget:		-0.029	
(U) FY 2003 President's Budget:		3.272	3.199

CHANGE SUMMARY EXPLANATION:

(U) Funding: The FY2002 decrease of \$.0029 million is for an undistributed congressional reduction.

(U) Schedule: Not applicable.

(U) Technical: Not applicable.

(U) C. OTHER PROGRAM FUNDING SUMMARY: Not applicable.

(U) D. ACQUISITION STRATEGY: Not applicable.

(U) E. SCHEDULE PROFILE: Not applicable.

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CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 1)										DATE: February 2002		
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT				PROJECT NUMBER AND NAME					
RDT&E, N / BA-6			0605863N - RDT&E Ship and Aircraft Support				S2924 - RDT&E Self-Defense Test Ship (STDS)					
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 01 Cost	FY 01 Award Date	FY 02 Cost	FY 02 Award Date	FY 03 Cost	FY 03 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Labor	WR	PHD,NSWC				0.583	10/01	0.650	10/02	Continuing	Continuing	
Contract	WR	PHD,NSWC				1.323	10/01	1.290	10/02	Continuing	Continuing	
Repair/Maintenance	WR	PHD/NSWC				0.801	10/01	0.882	10/02	Continuing	Continuing	
Port Services	WR	PHD/NSWC				0.227	10/01	0.250	10/02	Continuing	Continuing	
Supplies	WR	PHD/NSWC				0.133	10/01	0.127	10/02	Continuing	Continuing	
Subtotal Product Development						3.067		3.199		Continuing	Continuing	
Remarks: FY-02 is the first year S2924 was broken out as a separate Project.												
Subtotal Support												
Remarks:												

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CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 2)										DATE: February 2002		
APPROPRIATION/BUDGET ACTIVITY RDTE, N / BA-6			PROGRAM ELEMENT 0605863N - RDT&E Ship and Aircraft Support			PROJECT NUMBER AND NAME S2924 - RDT&E Self-Defense Test Ship (SDTS)						
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 01 Cost	FY 01 Award Date	FY 02 Cost	FY 02 Award Date	FY03 Cost	FY03 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Subtotal T&E												
Remarks: FY01 costs were incorporated under CLI S0354.												
Program Management Support	C/CPFF	Anteon Corp				0.205	10/01			Continuing	Continuing	
Subtotal Management						0.205				Continuing	Continuing	
Remarks:												
Total Cost						3.272		3.199		Continuing	Continuing	
Remarks:												

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Exhibit R-2, RDTE Budget Item Justification
(Exhibit R-2, page 10 of 19)

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification								DATE: February 2002			
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6		PROGRAM ELEMENT NUMBER AND NAME 0605863N - RDT&E,N Ship and Aircraft Support				PROJECT NUMBER AND NAME W0568 - RDT&E Aircraft Flight Hours					
COST (\$ in Millions)	Prior Year Cost		FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	Cost to Complete	Total Program
Project Cost			27.385	29.131	28.397	29.446	29.927	31.471	31.158	Continuing	Continuing
RDT&E Articles Qty											

(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:
 RDT&E Aircraft Flight Hours. This non-acquisition project supports direct flight hour costs, including organizational and intermediate level maintenance, as well as associated consumables, including petroleum, oil, and lubricants (POL). These flight hours are used for post-maintenance test flights, aircrew training, and the accomplishment of pilot proficiency requirements (approximately 3 hours per pilot per month), in support of Research and Development programs at four Naval Air Systems Command/Naval Surface Warfare Center/Office of Naval Research (NAVAIR/NSWC/ONR) flight activities, as well as Annual flight simulator training for Naval Air Warfare Center (NAWC) activities.

(U) PROGRAM ACCOMPLISHMENTS AND PLANS:

1. FY 2001 ACCOMPLISHMENTS:

- (U) (\$27.385) Met 75% of post-maintenance test flights, aircrew training, and proficiency flight hour requirements. Provided organizational and intermediate-level maintenance, supply and POL in support of RDT&E aircraft operations.

2. FY 2002 PLANS:

- (U) (\$28.249) Meet 80% of post-maintenance test flights, aircrew training, and proficiency flight hour requirements. Provide organizational and intermediate-level maintenance, supply and POL in support of RDT&E aircraft operations.

- (U) (\$.882) Portion of extramural program reserved for Small Business Innovation Research assessment in accordance with 15USC638.

3. FY2003 PLANS:

-(U) (\$28.397) Meet 75-80% of post-maintenance test flights, aircrew training, and proficiency flight hour requirements. Provide organizational and intermediate-level maintenance, supply and POL in support of RDT&E aircraft operations.

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification			DATE:
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME	
RDT&E, N / BA-6	0605863N - RDT&E Ship and Aircraft Support	W0568 - RDT&E Aircraft Flight Hours	
(U) B. PROGRAM CHANGE SUMMARY:			
	<u>FY2001</u>	<u>FY2002</u>	<u>FY2003</u>
(U) FY 2002 President's Budget:	28.719	29.391	
(U) Adjustments from the FY2002 President's Budget:	-1.334	-0.260	
(U) FY 2003 President's Budget:	27.385	29.131	28.397
CHANGE SUMMARY EXPLANATION:			
(U) Funding: The FY 2001 net decrease of \$1.334 million is due to reprioritization of requirements within the Navy. The FY 2002 decrease of \$.260 million is for an undistributed congressional reduction.			
(U) Schedule: Not applicable.			
(U) Technical: Not applicable.			
(U) C. OTHER PROGRAM FUNDING SUMMARY: Not applicable.			
(U) D. ACQUISITION STRATEGY: Not applicable.			
(U) E. SCHEDULE PROFILE: Not applicable.			

R-1 SHOPPING LIST - Item No. 162

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Exhibit R-2, RD TEN Budget Item Justification
(Exhibit R-2, page 12 of 19)

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CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 1)								DATE: February 2002				
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NUMBER AND NAME						
RDT&E, N / BA-6			0605863N - RDT&E Ship and Aircraft Support			W0568 - RDT&E Aircraft Flight Hours						
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 01 Cost	FY 01 Award Date	FY 02 Cost	FY 02 Award Date	FY 03 Cost	FY 03 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Flight Hours	WX	NAWCAD, Pax River MD	89.929	12.827	10/00	16.014	10/01	16.470	10/02	Continuing	Continuing	
Flight Hours	WX	NAWCWD, Pt Mugu CA	59.533	9.204	10/00	9.934	10/01	9.683	10/02	Continuing	Continuing	
Flight Hours	WX	NSWC, Panama City FL	11.864	0.404	10/00	0.437	10/01	0.426	10/02	Continuing	Continuing	
Flight Hours	WX	NRL, Pax River MD	22.533	1.443	10/00	1.748	10/01	1.704	10/02	Continuing	Continuing	
Flying Lab Study/Omega Tanker Project	PD	Various	0.521	2.800	09/01							
Miscellaneous	WX/WR	Various	7.515	0.707	10/00	0.116	10/01	0.114	10/02	Continuing	Continuing	
Subtotal Product Development			191.895	27.385		28.249		28.397		Continuing	Continuing	
Remarks:												
Subtotal Support												
Remarks:												

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CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 2)										DATE: February 2002			
APPROPRIATION/BUDGET ACTIVITY RD&E, N / BA-6			PROGRAM ELEMENT 0605863N - RD&E Ship and Aircraft Support			PROJECT NUMBER AND NAME W0568 - RD&E Aircraft Flight Hours							
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 01 Cost	FY 01 Award Date	FY 02 Cost	FY 02 Award Date	FY 03 Cost	FY 03 Award Date	Cost to Complete	Total Cost	Target Value of Contract	
Subtotal T&E													
Remarks:													
SBIR Assessment						0.882					0.882		
Subtotal Management						0.882					0.882		
Remarks:													
Total Cost			191.895	27.385		29.131		28.397		Continuing	Continuing		
Remarks:													

R-1 SHOPPING LIST - Item No. 162

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Exhibit R-2, RD&E Budget Item Justification
(Exhibit R-2, page 14 of 19)

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification								DATE: February 2002			
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6		PROGRAM ELEMENT NUMBER AND NAME 0605863N - RDT&E,N Ship and Aircraft Support				PROJECT NUMBER AND NAME W0569 - RDT&E,N Aircraft Support					
COST (\$ in Millions)	Prior Year Cost		FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	Cost to Complete	Total Program
Project Cost			31.365	28.584	29.540	33.864	39.411	35.581	36.246	Continuing	Continuing
RDT&E Articles Qty											

(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

RDT&E Aircraft Support. This continuing project funds costs associated with Navy Research, Development, Test and Evaluation (RDT&E) fixed and rotary wing aircraft which accomodate test and evaluation of aircraft/weapon systems. Testing aboard these platforms reduces the number of fleet units required to support RDT&E efforts. Included in these costs are Aviation Depot-Level Repairables (AVDLRs), which are spare and replacement aircraft parts and components. In FY 1998, AVDLR costs were reclassified as direct (customer-funded) costs, and a portion of the AVDLR funding to support customer programs were redistributed to customers. The remainder of AVDLR funding was retained in the account to support overhead maintenance related flight operations, aircrew training, and proficiency flight hours. This project also funds airframe Standard Depot Level Maintenance (SDLM), in-service repairs, modifications, emergency repairs, and engine repair, as well as aircraft material condition and field inspections. Additionally, it funds Individual Material Readiness List (IMRL) tools and support equipment, modification of in-service aircraft, and other systems for application to and compatibility with RDT&E requirements. Special Flight Test Instrumentation Pool (SFTIP) equipment, shared by programs to reduce or eliminate procurement lead times and save money, is also supported.

(U) PROGRAM ACCOMPLISHMENTS AND PLANS:

1. FY 2001 ACCOMPLISHMENTS:

- (U) (\$17.540) Continued the transition from ASPA/SDLM to the PDM program, while sustaining the following programs: IMRL, engine, in-service repairs support and modifications of aircraft in the RDT&E inventory. Continued operation and implementation of maintenance and material management programs at Naval Air Warfare Center activities.
- (U) (\$10.587) AVDLR support for NAVAIRWARCENACDIV Patuxent River, Maryland, NAVAIRWARCENWPNDIV Point Mugu, California, Naval Research Laboratory, Patuxent River, Maryland, and Coastal Systems Station, Panama City, Florida was provided for overhead flight hours, with RDT&E projects funding those AVDLR costs associated with project flight hours.
- (U) (\$3.238) Special Flight Test Instrumentation Pool (SFTIP) equipment, shared by programs to reduce or eliminate procurement lead times and save money was supported at NAVAIRWARCENACDIV Patuxent River, Maryland.

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Exhibit R-2, RDTEN Budget Item Justification
(Exhibit R-2, page 15 of 19)

UNCLASSIFIED

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2002
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6	PROGRAM ELEMENT NUMBER AND NAME 0605863N - RDT&E Ship and Aircraft Support	PROJECT NUMBER AND NAME W0569 - RDT&E Aircraft Support
<p>2. FY 2002 PLANS:</p> <p>- (U) (\$16.015) Continue the transition from ASPA/SDLM to the PDM program, while sustaining the following programs: IMRL, engine, in-service repairs support and modifications of aircraft in the RDT&E inventory. Operation and implementation of maintenance and material management programs at Naval Air Warfare Center activities will continue.</p> <p>- (U) (\$10.549) AVDLR support for NAVAIRWARCENACDIV Patuxent River, Maryland, NAVAIRWARCENWPNDIV Point Mugu, California, Naval Research Laboratory, Patuxent River, Maryland, and Coastal Systems Station, Panama City, Florida will be provided for overhead flight hours, with RDT&E projects funding those AVDLR costs associated with project flight hours.</p> <p>- (U) (\$1.155) Special Flight Test Instrumentation Pool (SFTIP) equipment, shared by programs to reduce or eliminate procurement lead times and save money will be supported at NAVAIRWARCENACDIV Patuxent River, Maryland.</p> <p>- (U) (\$.865) Portion of extramural program reserved for Small Business Innovation Research assessment in accordance with 15USC638.</p> <p>3. FY2003 PLANS:</p> <p>-(U) (\$17.123) Continue the transition from ASPA/SDLM to the PDM program, while sustaining the following programs: IMRL, engine, in-service repairs support and modifications of aircraft in the RDT&E inventory. Operation and implementation of maintenance and material management programs at Naval Air Warfare Center activities will continue.</p> <p>- (U) (\$11.234) AVDLR support for NAVAIRWARCENACDIV Patuxent River, Maryland, NAVAIRWARCENWPNDIV Point Mugu, California, Naval Research Laboratory, Patuxent River, Maryland, and Coastal Systems Station, Panama City, Florida will be provided for overhead flight hours, with RDT&E projects funding those AVDLR costs associated with project flight hours.</p> <p>- (U) (\$1.183) Special Flight Test Instrumentation Pool (SFTIP) equipment, shared by programs to reduce or eliminate procurement lead times and save money will be supported at NAVAIRWARCENACDIV Patuxent River, Maryland.</p>		

R-1 SHOPPING LIST - Item No. 162

UNCLASSIFIED

Exhibit R-2, RDTEN Budget Item Justification
(Exhibit R-2, page 16 of 19)

UNCLASSIFIED

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification			DATE:
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME	
RDT&E, N / BA-6	0605863N - RDT&E Ship and Aircraft Support	W0569 - RDT&E Aircraft Support	
(U) B. PROGRAM CHANGE SUMMARY:			
	<u>FY2001</u>	<u>FY2002</u>	<u>FY2003</u>
(U) FY 2002 President's Budget:	31.018	28.839	
(U) Adjustments from the FY2002 President's Budget:	0.347	-0.255	
(U) FY 2003 President's Budget:	31.365	28.584	29.540
CHANGE SUMMARY EXPLANATION:			
(U) Funding: The FY 2001 net increase of \$.347 million consists of a \$.897 million increase for emergent aircraft repairs offset by a \$.447 million decrease for reprioritization of requirements within the Navy and a \$.103 million decrease for a Small Business Innovative Research assessment. The FY 2002 decrease of \$.255 million is for an undistributed congressional reduction.			
(U) Schedule: Not applicable.			
(U) Technical: Not applicable.			
(U) C. OTHER PROGRAM FUNDING SUMMARY: Not applicable.			
(U) D. ACQUISITION STRATEGY: Not applicable.			
(U) E. SCHEDULE PROFILE: Not applicable.			

R-1 SHOPPING LIST - Item No. 162

UNCLASSIFIED

Exhibit R-2, RD TEN Budget Item Justification
(Exhibit R-2, page 17 of 19)

UNCLASSIFIED

CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 1)								DATE: February 2002				
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NUMBER AND NAME						
RDT&E, N / BA-6			0605863N - RDT&E Ship and Aircraft Support			W0569 - RDT&E Aircraft Support						
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 01 Cost	FY 01 Award Date	FY 02 Cost	FY 02 Award Date	FY 03 Cost	FY 03 Award Date	Cost to Complete	Total Cost	Target Value of Contract
AVDLR	WX	Various	265.950	10.587	10/00	10.030	10/01	11.234	10/02	Continuing	Continuing	
Aircraft Rework (SDLM, PDM, IMC)	WX/MIPR	Various	84.690	11.512	10/00	9.798	10/01	11.040	10/02	Continuing	Continuing	
Engines	WX/MIPR	Various	40.730	3.075	10/00	3.797	10/01	2.956	10/02	Continuing	Continuing	
In-Service Repairs	WX	Various	14.790	1.301	10/00	1.846	10/01	1.892	10/02	Continuing	Continuing	
SFTIP	WX	NAWCAD Pax Riv MD	18.570	3.238	10/00	1.155	10/01	1.183	10/02	Continuing	Continuing	
Misc (Less than \$1M)	WX	Various	16.920	0.850	10/00	0.049	10/01	0.443	10/02	Continuing	Continuing	
Subtotal Product Development			441.650	30.563		26.675		28.748		Continuing	Continuing	
Remarks:												
Subtotal Support												
Remarks:												

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CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 2)										DATE: February 2002		
APPROPRIATION/BUDGET ACTIVITY RD&E, N / BA-6			PROGRAM ELEMENT 0605863N - RD&E Ship and Aircraft Support			PROJECT NUMBER AND NAME W0569 - RD&E Aircraft Support						
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 01 Cost	FY 01 Award Date	FY 02 Cost	FY 02 Award Date	FY 03 Cost	FY 03 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Subtotal T&E												
Remarks:												
Misc	WX/RX	Various		0.542	10/00	0.784	10/01	0.532	10/02	Continuing	Continuing	
Travel	WX	Various		0.260	10/00	0.260	10/01	0.260	10/02	Continuing	Continuing	
SBIR Assessment						0.865					0.865	
Subtotal Management				0.802		1.909		0.792		Continuing	Continuing	
Remarks:												
Total Cost			441.650	31.365		28.584		29.540		Continuing	Continuing	
Remarks:												

R-1 SHOPPING LIST - Item No. 162

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Exhibit R-2, RD&E Budget Item Justification
(Exhibit R-2, page 19 of 19)

UNCLASSIFIED

CLASSIFICATION:

EXHIBIT R-2, RDT&E Budget Item Justification								DATE: February 2002			
APPROPRIATION/BUDGET ACTIVITY RESEARCH DEVELOPMENT TEST & EVALUATION, NAVY / BA-6						R-1 ITEM NOMENCLATURE 0605864N Test and Evaluation Support					
COST (\$ in Millions)	Prior Years Cost		FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	Cost to Complete	Total Program
Total PE Cost			272.802	276.468	278.838	284.619	286.891	289.862	295.494	Continuing	Continuing
W0541 Atlantic Undersea Test and Evaluation Center			49.205	47.633	48.136	50.724	49.072	49.656	50.894	Continuing	Continuing
W0566 NAVAIR Environmental Compliance			4.425	3.931	4.360	4.219	4.586	4.660	4.156	Continuing	Continuing
W0653 Naval Air Warfare Center Weapons Division			123.249	115.893	118.181	119.976	123.177	124.998	127.701	Continuing	Continuing
W0654 Naval Air Warfare Center Aircraft Division			93.941	86.114	88.949	87.580	87.636	87.795	89.634	Continuing	Continuing
W2921 Pacific Missile Range Facility*			1.982	2.059	2.123	2.187	2.280	2.377	2.475	Continuing	Continuing
W2922 Maintenance and Repair				16.972	17.089	19.933	20.140	20.376	20.634	Continuing	Continuing
W9094 Safety & Surviv Study of Protec Pumice Tech				2.181							2.181
W9095 Collaborative Virtual Inter Design Environment				1.685							1.685
Quantity of RDT&E Articles	Not Applicable										
(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: This program provides institutional maintenance and operations support for: the Naval Undersea Warfare Center Detachment Atlantic Undersea Test and Evaluation Center (NAVUNSEAWARCEN DET AUTEC), Andros Island, Bahamas; the Naval Air Systems Command MRTFB Environmental Compliance Program; Naval Air Warfare Center Weapons Division (NAVAIRWARCENWPNDIV), Point Mugu and China Lake, CA; Naval Air Warfare Center Aircraft Division (NAVAIRWARCENACDIV), Patuxent River, MD; T&E related capabilities at the Pacific Missile Range Facility, Barking Sands, HI (beginning in FY02); and Maintenance and Repair at NAVAIRWARCENWPNDIV and NAVAIRWARCENACDIV (beginning in FY02); the Congressionally mandated Safety and Survivability Study of Protective Pumice Technology and Collaborative Virtual Interactive Design Environment projects. The Test and Evaluation (T&E) activities make up the Navy portion of the Department of Defense's Major Range and Test Facility Base (MRTFB). These activities are chartered to perform T&E for the development and acquisition of technologically advanced weapons systems. Core T&E capabilities and capacity are operated to obtain weapons system performance documentation for acquisition program milestone decisions to provide operational forces with effective weapons systems. This program provides Navy Acquisition Program Managers required test capabilities; lowers cost of T&E; removes cost and scheduling impact of providing their own T&E resources; and retains the physical airspace, land space and sea space needed to conduct testing.											
(U) JUSTIFICATION FOR BUDGET ACTIVITY: This program is funded under RDT&E MANAGEMENT SUPPORT because it supports the operations and installations required for general research and development use.											

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Exhibit R-2, RDTEN Budget Item Justification
(Exhibit R-2, page 1 of 28)

UNCLASSIFIED

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification								DATE:			
								February 2002			
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME					PROJECT NUMBER AND NAME					
RDT&E, N / BA-6	0605864N Test and Evaluation Support					W0541 Atlantic Undersea Test and Evaluation Center					
COST (\$ in Millions)	Prior Years Cost		FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	Cost to Complete	Total Program
Project Cost			49.205	47.633	48.136	50.724	49.072	49.656	50.894	Continuing	Continuing
RDT&E Articles Qty											

(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

This project provides continuing maintenance and operations support for the Atlantic Undersea Test and Evaluation Center (AUTC), a Test and Evaluation (T&E) facility for collecting selected underwater, surface and air tracking data on test participants. NAVUNSEAWARCEN DET AUTC, Andros Island, Bahamas, includes the Weapons Range, Shallow Water Range and Minefield, NATO Naval Forces Sensor & Weapon Accuracy Check Site, Weapons Acoustic Measurement Capability, and an Ocean Haul Down Facility for flow noise testing on large, buoyant bodies. The Weapons Range provides three-dimensional (undersea, surface, and air) precision tracking capability in support of Anti-Submarine Warfare Development trials. The Shallow Water Range and Minefield provide similar three-dimensional tracking capability in water depths between 200 and 2,000 feet, plus a variety of moored and tethered mine-shaped targets. The NATO Fleet Operational Readiness Accuracy Check Site (FORACS) provides the capability to accurately calibrate and align electronic, optical, acoustic, and navigational systems installed on submarines, surface ships and helicopters. AUTC also has a portable, 3-D tracking capability, the Buoyed Acoustic Real-Time Tracking System (BARTS). The NAVUNSEAWARCEN DET AUTC at West Palm Beach, Florida provides technical expertise in tracking systems, liaison and test planning with range users, test scheduling, and logistic support.

(U) PROGRAM ACCOMPLISHMENTS AND PLANS:

1. FY 2001 ACCOMPLISHMENTS:

- (U) (\$26.318) Maintained and operated core test support resources, instrumentation systems, and marine craft required to perform AUTC's mission. Replenished spares inventory to minimum levels. Provided maintenance and repair efforts to perform high priority items deferred from previous years. Performed contract oversight and administrative support on the AUTC maintenance and operations support contract.

- (U) (\$10.238) Provided rental payments to the Bahamian government for use of land and ocean in the Bahamas. FY01 increase based on latest negotiated US/GCOB agreement.

- (U) (\$12.649) Provided civilian pay; travel; transportation; utilities/leases/rentals; communications; aircraft/ship/miscellaneous petroleum, oil, lubricants (POL); supplies; general and administrative efforts; and, lease payments to the General Services Administrative (GSA) for facilities at West Palm Beach, FL required to maintain and operate AUTC resources and capabilities.

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2002
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6	PROGRAM ELEMENT NUMBER AND NAME 0605864N Test and Evaluation Support	PROJECT NUMBER AND NAME W0541 Atlantic Undersea Test and Evaluation Center
<p>2. FY 2002 PLANS:</p> <ul style="list-style-type: none">- (U) (\$22.271) Continue to maintain and operate core test support resources, instrumentation systems, and marine craft required to perform AUTECH's mission. Replenish spares inventory to minimum levels. Provide maintenance and repair efforts to perform high priority items deferred from previous years. Perform contract oversight and administrative support on the AUTECH maintenance and operations support contract.- (U) (\$10.668) Continue rental payments to the Bahamian government for use of land and ocean in the Bahamas. FY 2002 amount based on latest negotiated US/GCOB agreement.- (U) (\$13.237) Continue civilian pay; travel; transportation; utilities/leases/rentals; communications; aircraft/ship/miscellaneous petroleum, oil, lubricants; supplies; general and administrative efforts; and, lease payments to the General Services Administrative for facilities at West Palm Beach, FL required to maintain and operate AUTECH resources and capabilities.- (U) (\$1.457) Portion of extramural program reserved for Small Business Innovation Research assessment. <p>3. FY 2003 PLANS:</p> <ul style="list-style-type: none">- (U) (\$23.436) Continue to maintain and operate core test support resources, instrumentation systems, and marine craft required to perform AUTECH's mission. Replenish spares inventory to minimum levels. Provide maintenance and repair efforts to perform high priority items deferred from previous years. Perform contract oversight and administrative support on the AUTECH maintenance and operations support contract.- (U) (\$10.850) Continue rental payments to the Bahamian government for use of land and ocean in the Bahamas. FY 2003 amount based on latest negotiated US/GCOB agreement.- (U) (\$13.850) Continue civilian pay; travel; transportation; utilities/leases/rentals; communications; aircraft/ship/miscellaneous petroleum, oil, lubricants; supplies; general and administrative efforts; and, lease payments to the General Services Administrative for facilities at West Palm Beach, FL required to maintain and operate AUTECH resources and capabilities.		

R-1 SHOPPING LIST - Item No. 163

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Exhibit R-2, RDTEN Budget Item Justification
(Exhibit R-2, page 3 of 28)

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification			DATE: February 2002																																															
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6	PROGRAM ELEMENT NUMBER AND NAME 0605864N Test and Evaluation Support	PROJECT NUMBER AND NAME W0541 Atlantic Undersea Test and Evaluation Center																																																
<p>(U) B. PROGRAM CHANGE SUMMARY:</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th style="text-align: center;"><u>FY2001</u></th> <th style="text-align: center;"><u>FY2002</u></th> <th style="text-align: center;"><u>FY2003</u></th> </tr> </thead> <tbody> <tr> <td>(U) FY 2002 President's Budget:</td> <td style="text-align: right;">47.109</td> <td style="text-align: right;">48.583</td> <td></td> </tr> <tr> <td>(U) Adjustments from the FY2002 President's Budget:</td> <td style="text-align: right;">2.096</td> <td style="text-align: right;">-0.950</td> <td></td> </tr> <tr> <td>(U) FY 2003 President's Budget:</td> <td style="text-align: right;">49.205</td> <td style="text-align: right;">47.633</td> <td style="text-align: right;">48.136</td> </tr> </tbody> </table> <p>CHANGE SUMMARY EXPLANATION:</p> <p>(U) Funding: The FY2001 net increase of \$2.096 million consists of a \$2.580 million increase for critical maintenance and operations support offset by a \$.327 million decrease for a Small Business Innovation Research Assessment and \$.157 million decrease for reprioritization of requirements within the Navy. The FY2002 net decrease of \$.950 million consist of a \$.525 million decrease for a congressional reduction of Test and Evaluation Support and a \$.425 million decrease for an undistributed congressional reduction.</p> <p>(U) Schedule: Not Applicable</p> <p>(U) Technical: Not Applicable</p> <p>(U) C. OTHER PROGRAM FUNDING SUMMARY:</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;"><u>Line Item No. & Name</u></th> <th style="text-align: center;"><u>FY 2001</u></th> <th style="text-align: center;"><u>FY 2002</u></th> <th style="text-align: center;"><u>FY 2003</u></th> <th style="text-align: center;"><u>FY 2004</u></th> <th style="text-align: center;"><u>FY 2005</u></th> <th style="text-align: center;"><u>FY 2006</u></th> <th style="text-align: center;"><u>FY 2007</u></th> <th style="text-align: center;"><u>To Complete</u></th> <th style="text-align: center;"><u>Total Cost</u></th> </tr> </thead> <tbody> <tr> <td>Not Applicable</td> <td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> <tr> <td>(U) P.E. 0604759, Major Test and Evaluation Investment</td> <td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> </tbody> </table> <p>(U) D. ACQUISITION STRATEGY: N/A</p> <p>(U) E. SCHEDULE PROFILE: N/A</p>						<u>FY2001</u>	<u>FY2002</u>	<u>FY2003</u>	(U) FY 2002 President's Budget:	47.109	48.583		(U) Adjustments from the FY2002 President's Budget:	2.096	-0.950		(U) FY 2003 President's Budget:	49.205	47.633	48.136	<u>Line Item No. & Name</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>To Complete</u>	<u>Total Cost</u>	Not Applicable										(U) P.E. 0604759, Major Test and Evaluation Investment									
	<u>FY2001</u>	<u>FY2002</u>	<u>FY2003</u>																																															
(U) FY 2002 President's Budget:	47.109	48.583																																																
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(U) FY 2003 President's Budget:	49.205	47.633	48.136																																															
<u>Line Item No. & Name</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>To Complete</u>	<u>Total Cost</u>																																									
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(U) P.E. 0604759, Major Test and Evaluation Investment																																																		

R-1 SHOPPING LIST - Item No. 163

UNCLASSIFIED

Exhibit R-2, RDTEN Budget Item Justification
(Exhibit R-2, page 4 of 28)

UNCLASSIFIED

CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 1)								DATE: February 2002				
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NUMBER AND NAME						
RDT&E, N / BA-6			0605864N Test and Evaluation Support			W0541 Atlantic Undersea Test and Evaluation Center						
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 01 Cost	FY 01 Award Date	FY 02 Cost	FY 02 Award Date	FY 03 Cost	FY 03 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Bahamian Lease	RX	NAVFAC, Washington DC	160.975	10.238	10/00	10.668	10/01	10.850	10/02	Continuing	Continuing	
In-house Efforts	WX	AUTEC, Andros Is., Bahama	816.076		10/00		10/01		10/02	Continuing	Continuing	
Civilian Pay				3.041		3.163		3.289		Continuing	Continuing	
Travel				0.326		0.336		0.346		Continuing	Continuing	
Transportation				2.480		2.604		2.734		Continuing	Continuing	
Communications				0.439		0.461		0.484		Continuing	Continuing	
Aircraft POL				0.429		0.450		0.473		Continuing	Continuing	
Ships POL				0.333		0.350		0.367		Continuing	Continuing	
Supplies				2.017		2.118		2.224		Continuing	Continuing	
Other POL				2.099		2.204		2.314		Continuing	Continuing	
G&A Expense				0.875		0.910		0.946		Continuing	Continuing	
WPB Facility Rental				0.610		0.641		0.673		Continuing	Continuing	
Other Purchased Services				26.318		22.271		23.436		Continuing	Continuing	
SBIR Assessment						1.457					1.457	

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification								DATE: February 2002			
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6		PROGRAM ELEMENT NUMBER AND NAME 0605864N Test and Evaluation Support				PROJECT NUMBER AND NAME W0566 NAVAIR Environmental Compliance					
COST (\$ in Millions)	Prior Year Cost		FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	Cost to Complete	Total Program
Project Cost			4.425	3.931	4.360	4.219	4.586	4.660	4.156	Continuing	Continuing
RDT&E Articles Qty											

(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:
This continuing project supports environmental compliance, conservation and pollution prevention related efforts at the Navy Major Range Test Facility Bases (MRTFB) located at Patuxent River, MD, China Lake, CA, Point Mugu, CA, and Atlantic Undersea Test and Evaluation Center (AUTEC), Bahamas. The Navy MRTFB environmental projects include ongoing efforts to comply with Federal, State, and local environmental requirements.

(U) PROGRAM ACCOMPLISHMENTS AND PLANS:

1. FY 2001 ACCOMPLISHMENTS:
- (U) (\$4.425) Continued UST remediations at Patuxent River. Continued the removal and disposal of PCB contaminated items at China Lake and Patuxent River. Continued upgrade of an oily waste/waste oil (OW/WO) management/recycle facility at Patuxent River. Continued refrigeration system replacement at China Lake's SKYTOP test area. Continued comprehensive air pollution meterology studies at Point Mugu.

2. FY 2002 PLANS:
- (U) (\$3.811) Continue UST remediations at Patuxent River. Conduct a UST closure/change in service at Patuxent River. Continue the removal and disposal of Polychlorinated Biphenyl (PCB) contaminated items at China Lake and Patuxent River. Continue upgrade of an oily waste/waste oil (OW/WO) management/recycle facility at Patuxent River. Continue refrigeration system replacement at China Lake's SKYTOP test area. Continue comprehensive air pollution meterology studies at Point Mugu.

- (U) (\$.120) Portion of extramural program reserved for Small Business Innovation Research assessment.

3. FY 2003 PLANS:
- (U) (4.360) Continue UST remediations at Patuxent River. Conduct a UST closure/change in service at Patuxent River. Continue the removal and disposal of PCB contaminated items at China Lake and Patuxent River. Continue upgrade of an oily waste/waste oil (OW/WO) management/recycle facility at Patuxent River. Continue refrigeration system replacement at China Lake's SKYTOP test area. Continue comprehensive air pollution meterology studies at Point Mugu.

R-1 SHOPPING LIST - Item No. 163

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Exhibit R-2, RDTEN Budget Item Justification
(Exhibit R-2, page 6 of 28)

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification				DATE: Febraury 2002	
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6		PROGRAM ELEMENT NUMBER AND NAME 0605864N Test and Evaluation Support		PROJECT NUMBER AND NAME W0566 NAVAIR Environmental Compliance	

(U) B. PROGRAM CHANGE SUMMARY:

	<u>FY2001</u>	<u>FY2002</u>	<u>FY2003</u>
(U) FY 2002 President's Budget:	4.44	4.009	
(U) Adjustments from the FY2002 President's Budget:	-0.015	-0.078	
(U) FY 2003 President's Budget:	4.425	3.931	4.36

CHANGE SUMMARY EXPLANATION:

(U) Funding: FY 2001 decrease of \$.015 million is for reprioritization of requirements within the Navy. FY 2002 decrease of \$.078 million consists of \$.043 million for a congressional reduction of Test and Evaluation Support and \$.035 million decrease for an undistributed congressional reduction.

(U) Schedule: Not Applicable.

(U) Technical: Not Applicable.

(U) C. OTHER PROGRAM FUNDING SUMMARY:

<u>Line Item No. & Name</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>To Complete</u>	<u>Total Cost</u>
Not Applicable									
P.E. 0604759N, Major Test and Evaluation Investment									

(U) D. ACQUISITION STRATEGY: N/A

(U) E. SCHEDULE PROFILE: N/A

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Exhibit R-2, RD TEN Budget Item Justification
(Exhibit R-2, page 8 of 28)

R-1 SHOPPING LIST - Item No. 163

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification								DATE:			
								February 2002			
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME					PROJECT NUMBER AND NAME					
RDT&E, N / BA-6	0605864N Test and Evaluation Support					W0653 Naval Air Warfare Center Weapons Division					
COST (\$ in Millions)	Prior Years Cost		FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	Cost to Complete	Total Program
Project Cost			123.249	115.893	118.181	119.976	123.177	124.998	127.701	Continuing	Continuing
RDT&E Articles Qty											

(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

Project provides continuing maintenance and operational support for the NAVAIRWARCENWPNDIV Test and Evaluation (T&E) capabilities. These capabilities include the Pacific Ranges and Facilities, consisting of China Lake Ranges and the Point Mugu Sea Range, aerial and surface targets, test instrumentation, and T&E aircraft. The Pacific Ranges use China Lake's 1.1 million acres of land and 17,000 square miles of military restricted (R-2508) airspace together with Point Mugu's 125,000 square miles of instrumented sea range and 36,000 square miles of controlled overlying airspace, and airfield and test instrumentation at San Nicolas Island to perform its Test and Evaluation (T&E) mission. Included in the China Lake ranges is the Electronic Combat Range (ECR), which provides outdoor free space development and operational testing of airborne electronic warfare (EW) systems and tactics against shipboard and land based air defense systems. These ranges perform metric radar, multilateration and optical tracking of test objects; command, control, and destruct for range safety purposes; communications; frequency interference control and analysis; collection processing and display of telemetered data; real-time data processing and display; and the operation of a full scale aerial target launch capability. Other test capabilities include an outdoor High Power Microwave (HPM) measurement facility; propulsion, warhead, environmental, rocket motor, and other missile component test facilities; parachute/weapon recovery system test facilities; and gun ranges. This project funds costs not chargeable to customers.

(U) PROGRAM ACCOMPLISHMENTS AND PLANS:

1. FY 2001 ACCOMPLISHMENTS:

- (U) (\$46.815) Operated and maintained mission essential/core MRTFB capabilities to meet customer test workload. Funded civilian labor required to manage, operate, and maintain the MRTFB.
- (U) (\$ 5.601) Provided travel, transportation, collateral equipment, and supplies required to support continued operations of the MRTFB.
- (U) (\$23.052) Provided communications, purchased equipment maintenance, printing and reproduction, and purchased service contracts necessary to manage and sustain MRTFB operations.
- (U) (\$ 8.702) Provided Major Repair & critical maintenance to sustain MRTFB facilities.
- (U) (\$33.458) Reimbursed the Command for essential General and Administrative (G&A) support services and NMCI, (e.g., comptroller, contracting, personnel, and other services).
- (U) (\$ 5.621) Provided mission essential annual utility costs, equipment rentals, and land, building and facility leases.

R-1 SHOPPING LIST - Item No. 163

UNCLASSIFIED

Exhibit R-2, RDTEN Budget Item Justification
(Exhibit R-2, page 9 of 28)

UNCLASSIFIED

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE:
		February 2002
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA-6	0605864N Test and Evaluation Support	W0653 Naval Air Warfare Center Weapons Division
<p>2. FY 2002 PLANS:</p> <ul style="list-style-type: none"> - (U) (\$49.724) Continue to operate and manage mission essential/core MRTFB capabilities to meet customer test workload. Funds civilian labor required to manage and operate the MRTFB. - (U) (\$ 4.731) Continue to provide travel, transportation, collateral equipment, and supplies required to support continued operations of the MRTFB. - (U) (\$22.233) Continue to provide communications, purchased equipment maintenance, printing and reproduction, and purchased service contracts necessary to manage and sustain MRTFB operations. - (U) (\$31.027) Reimburse the Command for essential General and Administrative (G&A) support services and NMCI, (e.g., comptroller, contracting, personnel, and other services). - (U) (\$ 4.632) Continue to provide mission essential annual utility costs, equipment rentals, and land, building and facility leases. - (U) (\$3.546) Portion of extramural program reserved for Small Business Innovation Research assessment. <p>3. FY 2003 PLANS:</p> <ul style="list-style-type: none"> - (U) (\$51.298) Continue to operate and manage mission essential/core MRTFB capabilities to meet customer test workload. Funds civilian labor required to manage and operate the MRTFB. - (U) (\$ 5.039) Continue to provide travel, transportation, collateral equipment, and supplies required to support continued operations of the MRTFB. - (U) (\$25.341) Continue to provide communications, purchased equipment maintenance, printing and reproduction, and purchased service contracts necessary to manage and sustain MRTFB operations. - (U) (\$31.369) Reimburse the Command for essential General and Administrative (G&A) support services and NMCI, (e.g., comptroller, contracting, personnel, and other services). - (U) (\$ 5.134) Continue to provide mission essential annual utility costs, equipment rentals, and land, building and facility leases. 		

R-1 SHOPPING LIST - Item No. 163

UNCLASSIFIED

Exhibit R-2, RDTE Budget Item Justification
(Exhibit R-2, page 10 of 28)

UNCLASSIFIED

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification			DATE: February 2002																																																																																							
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6	PROGRAM ELEMENT NUMBER AND NAME 0605864N Test and Evaluation Support	PROJECT NUMBER AND NAME W0653 Naval Air Warfare Center Weapons Division																																																																																								
<p>(U) B. PROGRAM CHANGE SUMMARY:</p> <table style="width: 100%; margin-top: 20px;"> <thead> <tr> <th></th> <th style="text-align: right;"><u>FY2001</u></th> <th style="text-align: right;"><u>FY2002</u></th> <th style="text-align: right;"><u>FY2003</u></th> </tr> </thead> <tbody> <tr> <td>(U) FY 2002 President's Budget:</td> <td style="text-align: right;">123.499</td> <td style="text-align: right;">118.204</td> <td></td> </tr> <tr> <td>(U) Adjustments from the FY 2002 President's Budget:</td> <td style="text-align: right;">-0.250</td> <td style="text-align: right;">-2.311</td> <td></td> </tr> <tr> <td>(U) FY 2003 President's Budget:</td> <td style="text-align: right;">123.249</td> <td style="text-align: right;">115.893</td> <td style="text-align: right;">118.181</td> </tr> </tbody> </table> <p style="margin-top: 20px;">CHANGE SUMMARY EXPLANATION:</p> <p>(U) Funding: The FY 2001 decrease of \$0.250 million consists of a decrease for reprioritization of requirements within the Navy. The FY 2002 decrease of \$2.311 million consists of a \$1.278 million decrease for a congressional reduction of Test and Evaluation Support and a \$1.033 million decrease for an undistributed congressional reduction.</p> <p>(U) Schedule: Not Applicable</p> <p>(U) Technical: Not Applicable</p> <p style="margin-top: 20px;">(U) C. OTHER PROGRAM FUNDING SUMMARY:</p> <table style="width: 100%; margin-top: 10px;"> <thead> <tr> <th style="text-align: left;"><u>Line Item No. & Name</u></th> <th style="text-align: right;"><u>FY 2001</u></th> <th style="text-align: right;"><u>FY 2002</u></th> <th style="text-align: right;"><u>FY 2003</u></th> <th style="text-align: right;"><u>FY 2004</u></th> <th style="text-align: right;"><u>FY 2005</u></th> <th style="text-align: right;"><u>FY 2006</u></th> <th style="text-align: right;"><u>FY 2007</u></th> <th style="text-align: right;"><u>To Complete</u></th> <th style="text-align: right;"><u>Total Cost</u></th> </tr> </thead> <tbody> <tr> <td colspan="10">Not Applicable</td> </tr> <tr> <td colspan="10">Related RDT&E:</td> </tr> <tr> <td colspan="10">(U) P.E. 0604759N, Major Test and Evaluation Investment</td> </tr> <tr> <td colspan="10">(U) P.E. 0604256N, Threat Simulator Development</td> </tr> <tr> <td colspan="10">(U) P.E. 0604258N, Threat Systems Development</td> </tr> <tr> <td colspan="10">(U) P.E. 0605863N, RDT&E Ship and Aircraft Support</td> </tr> </tbody> </table> <p style="margin-top: 20px;">(U) D. ACQUISITION STRATEGY: Not Applicable</p> <p>(U) E. SCHEDULE PROFILE: Not Applicable</p>						<u>FY2001</u>	<u>FY2002</u>	<u>FY2003</u>	(U) FY 2002 President's Budget:	123.499	118.204		(U) Adjustments from the FY 2002 President's Budget:	-0.250	-2.311		(U) FY 2003 President's Budget:	123.249	115.893	118.181	<u>Line Item No. & Name</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>To Complete</u>	<u>Total Cost</u>	Not Applicable										Related RDT&E:										(U) P.E. 0604759N, Major Test and Evaluation Investment										(U) P.E. 0604256N, Threat Simulator Development										(U) P.E. 0604258N, Threat Systems Development										(U) P.E. 0605863N, RDT&E Ship and Aircraft Support									
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R-1 SHOPPING LIST - Item No. 163

UNCLASSIFIED

Exhibit R-2, RD TEN Budget Item Justification
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CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 1)								DATE: February 2002				
APPROPRIATION/BUDGET ACTIVITY RD&E, N / BA-6			PROGRAM ELEMENT 0605864N Test and Evaluation Support			PROJECT NUMBER AND NAME W0653 Naval Air Warfare Center Weapons Division						
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 01 Cost	FY 01 Award Date	FY 02 Cost	FY 02 Award Date	FY 03 Cost	FY 03 Award Date	Cost to Complete	Total Cost	Target Value of Contract
	WX	NAWCWD	2,889.994		10/00		10/01		10/02	Continuing	Continuing	
Civilian Pay				46.815		49.724		51.298		Continuing	Continuing	
Travel/Transportation/Comm/Printing				2.715		2.568		2.469		Continuing	Continuing	
Utilities/Leases				5.621		4.632		5.134		Continuing	Continuing	
Equipment Maintenance				3.746		1.241		1.109		Continuing	Continuing	
Range Ops/Support				19.306		20.992		24.232		Continuing	Continuing	
Facility Repairs/Minor Construction				8.702							8.702	
Supplies/Equipment				2.886		2.163		2.570		Continuing	Continuing	
General and Administrative/NMCI				33.458		31.027		31.369		Continuing	Continuing	
SBIR Assessment						3.546					3.546	
Subtotal Product Development			2,889.994	123.249		115.893		118.181		Continuing	Continuing	
<p>Remarks:</p> <p>FY 2001 to FY 2002 decrease in Facility Repairs/Minor Construction is due to a realignment of Maintenance and Repair/Minor Construction and Major Repair to continue in newly established Project Unit W2922.</p> <p>This project unit has no Product development, T&E or Management costs.</p>												

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification								DATE: February 2002			
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6		PROGRAM ELEMENT NUMBER AND NAME 0605864N Test and Evaluation Support				PROJECT NUMBER AND NAME W0654 Naval Air Warfare Center Aircraft Division					
COST (\$ in Millions)	Prior Years Cost		FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	Cost to Complete	Total Program
Project Cost			93.941	86.114	88.949	87.580	87.636	87.795	89.634	Continuing	Continuing
RDT&E Articles Qty											

(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

This project provides funds for the maintenance and operation of the NAVAIRWARCENACDIV's capabilities to conduct test and evaluation and provide fleet support for air platforms. NAVAIRWARCENACDIV has extensive airfield, flight test ranges, aircraft systems test facilities and simulation laboratories to support aircraft RDT&E. This includes 50,000 square miles of airspace, 39,375 square miles of sea space, and 7,950 acres of land space. Product areas include aircraft systems flight test and evaluation, carrier suitability certification, test article preparation, installed system test and evaluation, and modeling and simulation support of the acquisition process. The T&E Group, Patuxent River, performs development test and evaluation and supports operational test and evaluation of manned and unmanned air vehicle systems, including mission systems, equipment, subsystems, components, and support systems. This project also provides test and evaluation facilities for air-breathing propulsion systems and extensive facilities for conducting both installed and uninstalled aircraft engine development and test and evaluation. This project funds costs not chargeable to customers.

(U) PROGRAM ACCOMPLISHMENTS AND PLANS:

1. FY 2001 ACCOMPLISHMENTS:

- (U) (\$23.677) Operated and maintained mission essential/core MRTFB capabilities to meet customer test workload. Funded civilian labor required to manage, operate, and maintain the MRTFB.
- (U) (\$ 6.678) Provided travel, transportation, collateral equipment, and supplies required to support continued operations of the MRTFB.
- (U) (\$24.125) Provided communications, purchased equipment maintenance, printing and reproduction, and purchased service contracts necessary to manage and sustain MRTFB operations.
- (U) (\$11.741) Provided Major Repair & critical maintenance to sustain MRTFB facilities.
- (U) (\$23.745) Reimbursed the Command for essential General and Administrative (G&A) support services and NMCI, (e.g., comptroller, contracting, personnel, and other services).
- (U) (\$ 3.975) Provided mission essential annual utility costs, equipment rentals, and land, building and facility leases.

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Exhibit R-2, RDTEN Budget Item Justification
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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE:
		February 2002
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA-6	0605864N Test and Evaluation Support	W0654 Naval Air Warfare Center Aircraft Division
<p>2. FY 2002 PLANS:</p> <ul style="list-style-type: none"> - (U) (\$26.241) Continue to operate and manage mission essential/core MRTFB capabilities to meet customer test workload. Funds civilian labor required to manage and operate the MRTFB. - (U) (\$ 6.303) Continue to provide travel, transportation, collateral equipment, and supplies required to support continued operations of the MRTFB. - (U) (\$23.836) Continue to provide communications, purchased equipment maintenance, printing and reproduction, and purchased service contracts necessary to manage and sustain MRTFB operations. - (U) (\$23.086) Reimburse the Command for essential General and Administrative (G&A) support services and NMCI, (e.g., comptroller, contracting, personnel, and other services). - (U) (\$ 4.099) Continue to provide mission essential annual utility costs, equipment rentals, and land, building and facility leases. - (U) (\$ 2.549) Portion of extramural program reserved for Small Business Innovation Research assessment. <p>3. FY 2003 PLANS:</p> <ul style="list-style-type: none"> - (U) (\$27.346) Continue to operate and manage mission essential/core MRTFB capabilities to meet customer test workload. Funds civilian labor required to manage and operate the MRTFB. - (U) (\$ 6.122) Continue to provide travel, transportation, collateral equipment, and supplies required to support continued operations of the MRTFB. - (U) (\$27.101) Continue to provide communications, purchased equipment maintenance, printing and reproduction, and purchased service contracts necessary to manage and sustain MRTFB operations. - (U) (\$24.217) Reimburse the Command for essential General and Administrative (G&A) support services and NMCI, (e.g., comptroller, contracting, personnel, and other services). - (U) (\$ 4.163) Continue to provide mission essential annual utility costs, equipment rentals, and land, building and facility leases. 		

R-1 SHOPPING LIST - Item No. 163

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification			DATE: February 2002	
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6	PROGRAM ELEMENT NUMBER AND NAME 0605864N Test and Evaluation Support	PROJECT NUMBER AND NAME W0654 Naval Air Warfare Center Aircraft Division		

(U) B. PROGRAM CHANGE SUMMARY:

	<u>FY2001</u>	<u>FY2002</u>	<u>FY2003</u>
(U) FY 2002 President's Budget:	93.184	84.979	
(U) Adjustments from the FY 2002 President's Budget:	0.757	1.135	
(U) FY 2003 President's Budget:	93.941	86.114	88.949

CHANGE SUMMARY EXPLANATION:

(U) Funding: The FY2001 net increase of \$.757 million consists of a \$.850 million increase for Navy Marine Corp Intranet (NMCI) cost and a decrease of \$.093 million for reprioritization of requirements within the Navy. The FY2002 net increase of \$1.135 million consists of a \$2.205 million increase for the transfer of funds from Project Unit W2922 to Project Unit W0654 and a \$.618 million increase for multiple minor construction projects offset by a \$.920 million decrease for a congressional reduction of Test and Evaluation Support and a \$.768 million decrease for an undistributed congressional reduction..

(U) Schedule: Not Applicable

(U) Technical: Not Applicable

(U) C. OTHER PROGRAM FUNDING SUMMARY:

<u>Line Item No. & Name</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>To Complete</u>	<u>Total Cost</u>
Not Applicable									

Related RDT&E:

- (U) P.E. 0604759, Major Test and Evaluation Investment
- (U) P.E. 0604256N, Threat Simulator Development
- (U) P.E. 0605863N, RDT&E Ship and Aircraft Support

(U) D. ACQUISITION STRATEGY: Not Applicable

(U) E. SCHEDULE PROFILE: Not Applicable

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Exhibit R-2, RD TEN Budget Item Justification
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R-1 SHOPPING LIST - Item No. 163

Exhibit R-3 Cost Analysis (page 1)							DATE: February 2002					
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NUMBER AND NAME						
RDT&E, N / BA-6			0605864N Test and Evaluation Support			W0654 Naval Air Warfare Center Aircraft Division						
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 01 Cost	FY 01 Award Date	FY 02 Cost	FY 02 Award Date	FY 03 Cost	FY 03 Award Date	Cost to Complete	Total Cost	Target Value of Contract
	WX	NAWCAD Patuxent River	1,885.493		10/00		10/01		10/02	Continuing	Continuing	
Civilian Pay				23.677		26.241		27.346		Continuing	Continuing	
Travel/Transportation/Comm/Printing				1.391		1.357		1.309		Continuing	Continuing	
Utilities/Leases				3.975		4.099		4.163		Continuing	Continuing	
Equipment Maintenance				5.071		5.120		5.046		Continuing	Continuing	
Range Ops/Support				18.833		18.505		21.854		Continuing	Continuing	
Facility Repairs/Minor Construction				11.741							11.741	
Supplies/Equipment				5.508		5.157		5.014		Continuing	Continuing	
General and Administrative/NMCI				23.745		23.086		24.217		Continuing	Continuing	
SBIR Assessment						2.549					2.549	
Total Support			1,885.493	93.941		86.114		88.949		Continuing	Continuing	

Remarks: Difference between FY 2001 and FY 2002 Civilian Pay to fund positions required to operate test facilities within the structures of the CA Study implemented Most Efficient Organization (MEO). FY 2001 to FY 2002 decrease in Facility Repairs/Minor Construction is due to a realignment of Maintenance and Repair/Minor Construction and Major Repair to continue in newly established Project Unit W2922.

This project unit has no Product development, T&E or Management costs

UNCLASSIFIED

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification								DATE:				
								February 2002				
APPROPRIATION/BUDGET ACTIVITY		PROGRAM ELEMENT NUMBER AND NAME				PROJECT NUMBER AND NAME						
RDT&E, N / BA-6		0605864N Test and Evaluation Support				W2921 Pacific Missile Range Facility						
COST (\$ in Millions)		Prior Years Cost		FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	Cost to Complete	Total Program
Project Cost				1.982	2.059	2.123	2.187	2.280	2.377	2.475	Continuing	Continuing
RDT&E Articles Qty												
<p>(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:</p> <p>This project provides continuing maintenance and operations support for Test & Evaluation (T&E) related capabilities at the Pacific Missile Range Facility (PMRF). These capabilities have been approved for inclusion in the Navy's Major Range and Test Facility Base (MRTFB) starting in FY02. Located on Kauai, HI, PMRF's T&E capabilities include precision radar and telemetry assets, the Mobile Aerial Target Support System (MATSS), the Stabilized High-accuracy Optical Tracking System (SHOTS), and the Mobile Telemetry Reciever Systems (MRTS).</p> <p>(U) PROGRAM ACCOMPLISHMENTS AND PLANS:</p> <p>1. FY 2001 ACCOMPLISHMENTS:</p> <ul style="list-style-type: none">- (U) (\$.991) Operated and maintained core test support assets to meet customer's test workload.- (U) (\$.430) Funded civilian labor required to manage, operate, and maintain the PMRF T&E capability.- (U) (\$.012) Provided essential travel, transportation, and training to support the operations of the PMRF T&E capability.- (U) (\$.549) Funded final integration efforts of MRTFB related systems. <p>2. FY 2002 PLANS:</p> <ul style="list-style-type: none">- (U) (\$1.334) Continue to operate and maintain core MRTFB capabilities to meet customer's test workload.- (U) (\$.617) Continue to fund civilian labor required to manage, operate, and maintain the MRTFB.- (U) (\$.045) Continue to provide essential travel, transportation, and training to support the operations of the MRTFB.- (U) (\$.063) Portion of extramural program reserved for Small Business Innovation Research assessment. <p>3. FY 2003 PLANS:</p> <ul style="list-style-type: none">- (U) (\$1.352) Continue to operate and maintain core MRTFB capabilities to meet customer's test workload.- (U) (\$.709) Continue to fund civilian labor required to manage, operate, and maintain the MRTFB.- (U) (\$.062) Contineu to provide essential travel, transportation, and training to support the operations of the MRTFB.												

R-1 SHOPPING LIST - Item No. 163

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Exhibit R-2, RDTEN Budget Item Justification
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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification			DATE: February 2002	
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6	PROGRAM ELEMENT NUMBER AND NAME 0605864N Test and Evaluation Support	PROJECT NUMBER AND NAME W2921 Pacific Missile Range Facility		

(U) B. PROGRAM CHANGE SUMMARY:

	<u>FY2001</u>	<u>FY2002</u>	<u>FY2003</u>
(U) FY 2002 President's Budget:	1.982	2.100	
(U) Adjustments from the FY2002 President's Budget:	0.000	-0.041	
(U) FY 2003 President's Budget:	1.982	2.059	2.123

CHANGE SUMMARY EXPLANATION:

(U) Funding: The FY 2002 decrease of \$.041 million consist of a \$.023 million decrease for a congressional reduction of Test and Evaluation Support and a \$.018 million decrease for an undistributed congressional reduction.

(U) Schedule: Not Applicable

(U) Technical: Not Applicable

(U) C. OTHER PROGRAM FUNDING SUMMARY:

<u>Line Item No. & Name</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>To Complete</u>	<u>Total Cost</u>
Not Applicable									
Related RDT&E: 0604759N, Major T&E Investments									

(U) D. ACQUISITION STRATEGY: N/A

(U) E. SCHEDULE PROFILE: N/A

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Exhibit R-2, RD TEN Budget Item Justification
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Exhibit R-2, RD TEN Budget Item Justification
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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification									DATE: February 2002		
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6		PROGRAM ELEMENT NUMBER AND NAME 0605864N Test and Evaluation Support				PROJECT NUMBER AND NAME W2922 Maintenance and Repair					
COST (\$ in Millions)	Prior Years Cost		FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	Cost to Complete	Total Program
Project Cost				16.972	17.089	19.933	20.140	20.376	20.634	Continuing	Continuing
RDT&E Articles Qty											
<p>(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: This project provides funding for the maintenance and repair of the Major Range Test Facility Base (MRTFB) Real Property Maintenance Activities (RPMA) at the Naval Air Warfare Center Weapons Division (W0653) and the Naval Air Warfare Center Aircraft Division (W0654). Funds mission critical emergency services, reoccurring maintenance and repair, major repair projects. In addition it addresses priority items on the Backlog of Maintenance and Repair (BMAR) list.</p> <p>(U) PROGRAM ACCOMPLISHMENTS AND PLANS:</p> <p>1. FY 2001 ACCOMPLISHMENTS: - (U) (\$0) - N/A</p> <p>2. FY 2002 PLANS: - (U) (\$16.386) Continue to support mission critical emergency services, recurring maintenance and repair, and major repair efforts at the Naval Air Warfare Center Weapons and Aircraft Divisions. - (U) (\$.586) Portion of extramural program reserved for Small Business Innovation Research assessment.</p> <p>3. FY 2003 PLANS: - (U) (\$17.089) Continue to support mission critical emergency services, recurring maintenance and repair, and major repair efforts at the Naval Air Warfare Center Weapons and Aircraft Divisions.</p>											

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Exhibit R-2, RDTEN Budget Item Justification
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UNCLASSIFIED

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification						DATE: February 2002	
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6			PROGRAM ELEMENT NUMBER AND NAME 0605864N Test and Evaluation Support		PROJECT NUMBER AND NAME W2922 Maintenance and Repair		

(U) B. PROGRAM CHANGE SUMMARY:

	<u>FY2001</u>	<u>FY2002</u>	<u>FY2003</u>
(U) FY 2002 President's Budget:		19.539	
(U) Adjustments from the FY2002 President's Budget:		-2.567	
(U) FY 2003 President's Budget:		16.972	17.089

CHANGE SUMMARY EXPLANATION:

(U) Funding: The FY 2002 decrease of \$2.567 million reflects the \$2.205 million decrease for transfer of funds to Project Unit W0654; a \$.211 decrease for a congressional reduction of Test and Evaluation Support; and a \$.151 million decrease for an undistributed congressional reduction.

(U) Schedule: Not Applicable

(U) Technical: Not Applicable

(U) C. OTHER PROGRAM FUNDING SUMMARY:

<u>Line Item No. & Name</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>To Complete</u>	<u>Total Cost</u>
Not Applicable									
Related RDT&E: P.E. 0604759N, Major Test and Evaluation Investment									

(U) D. ACQUISITION STRATEGY: N/A

(U) E. SCHEDULE PROFILE: N/A

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Exhibit R-2, RD TEN Budget Item Justification
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Exhibit R-2, RD TEN Budget Item Justification
(Exhibit R-2, page 22 of 28)

R-1 SHOPPING LIST - Item No. 163

UNCLASSIFIED

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification								DATE: February 2002			
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME					PROJECT NUMBER AND NAME					
RDT&E, BA-6	0605864N Test and Evaluation Support					W9094 Safety & Survivability Study of Protectice Pumice Technology					
COST (\$ in Millions)	Prior Years Cost		FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	Cost to Complete	Total Program
Project Cost				2.181							2.181
RDT&E Articles Qty											
<p>(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:</p> <p>This project provides funding for pumice technology testing. Pumice is a shock-absorbing medium that can prevent sympathetic detonation of many of the ordnance devices used by DOD. Project will test pumice barriers to validate its ability to protect shipboard personnel and other ordnance from the effects of blast and extreme temperatures.</p> <p>(U) PROGRAM ACCOMPLISHMENTS AND PLANS:</p> <p>1. FY 2001 ACCOMPLISHMENTS:</p> <ul style="list-style-type: none"> - (U) (\$0) - Not Applicable. <p>2. FY 2002 PLANS:</p> <ul style="list-style-type: none"> - (U) (\$2.181) Supports major milestones for procuring and testing pumice technology for force protection (Congressional Add). <p>3. FY 2003 PLANS:</p> <ul style="list-style-type: none"> - (U) (\$0) - Not Applicable 											

R-1 SHOPPING LIST - Iterr 163

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Exhibit R-2, RD TEN Budget Item Justification
(Exhibit R-2, page 23 of 28)

UNCLASSIFIED

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification			DATE: February 2002																																			
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6	PROGRAM ELEMENT NUMBER AND NAME 0605864N Test and Evaluation Support	PROJECT NUMBER AND NAME W9094 Safety & Survivability Study of Protective Pumice Technology																																				
<p>(U) B. PROGRAM CHANGE SUMMARY:</p> <table style="margin-left: auto; margin-right: auto;"><thead><tr><th></th><th><u>FY2001</u></th><th><u>FY2002</u></th><th><u>FY2003</u></th></tr></thead><tbody><tr><td>(U) FY 2002 President's Budget:</td><td></td><td>0.000</td><td></td></tr><tr><td>(U) Adjustments from the FY2002 President's Budget:</td><td></td><td>2.181</td><td></td></tr><tr><td>(U) FY 2003 President's Budget:</td><td></td><td>2.181</td><td></td></tr></tbody></table> <p>CHANGE SUMMARY EXPLANATION:</p> <p style="margin-left: 40px;">(U) Funding: The FY 2002 increase is a Congressional Add for pumice technology testing.</p> <p style="margin-left: 40px;">(U) Schedule: Not Applicable</p> <p style="margin-left: 40px;">(U) Technical: Not Applicable</p> <p>(U) C. OTHER PROGRAM FUNDING SUMMARY:</p> <table style="margin-left: auto; margin-right: auto;"><thead><tr><th><u>Line Item No. & Name</u></th><th><u>FY 2001</u></th><th><u>FY 2002</u></th><th><u>FY 2003</u></th><th><u>FY 2004</u></th><th><u>FY 2005</u></th><th><u>FY 2006</u></th><th><u>FY 2007 To C</u></th><th><u>Total Cost</u></th></tr></thead><tbody><tr><td>Not Applicable</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></tbody></table> <p style="margin-left: 40px;">Related RDT&E: P.E. 0604759N, Major Test and Evaluation Investment</p> <p>(U) D. ACQUISITION STRATEGY: N/A</p> <p>(U) E. SCHEDULE PROFILE: N/A</p>						<u>FY2001</u>	<u>FY2002</u>	<u>FY2003</u>	(U) FY 2002 President's Budget:		0.000		(U) Adjustments from the FY2002 President's Budget:		2.181		(U) FY 2003 President's Budget:		2.181		<u>Line Item No. & Name</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007 To C</u>	<u>Total Cost</u>	Not Applicable								
	<u>FY2001</u>	<u>FY2002</u>	<u>FY2003</u>																																			
(U) FY 2002 President's Budget:		0.000																																				
(U) Adjustments from the FY2002 President's Budget:		2.181																																				
(U) FY 2003 President's Budget:		2.181																																				
<u>Line Item No. & Name</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007 To C</u>	<u>Total Cost</u>																														
Not Applicable																																						

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification									DATE: February 2002		
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME					PROJECT NUMBER AND NAME					
RDT&E, BA-6	0605864N Test and Evaluation Support					W9095 Collaborative Virtual Interactive Design Environment					
COST (\$ in Millions)	Prior Years Cost		FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	Cost to Complete	Total Program
Project Cost				1.685							1.685
RDT&E Articles Qty											
<p>(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:</p> <p>This project funds the Collaborative Virtual Interactive Design Environment (CVIDE), which will be used to provide the ability to validate design concepts and testing for new system's interoperability, functionality, and operational value through the used of distributed collaborative virtual reality environments.</p> <p>(U) PROGRAM ACCOMPLISHMENTS AND PLANS:</p> <p>1. FY 2001 ACCOMPLISHMENTS:</p> <p>- (U) (\$0) - Not Applicable.</p> <p>2. FY 2002 PLANS:</p> <p>- (U) (\$1.685) Supports major milestones for procuring and testing Virtual reality and simulation technology (Congressional Add).</p> <p>3. FY 2003 PLANS:</p> <p>- (U) (\$0) - Not Applicable.</p>											

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EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2002																																														
APPROPRIATION/BUDGET ACTIVITY RDT&E, BA-6	PROGRAM ELEMENT NUMBER AND NAME 0605864N Test and Evaluation Support	PROJECT NUMBER AND NAME W9095 Collaborative Virtual Interactive Design Environment																																														
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	<u>FY2001</u>	<u>FY2002</u>	<u>FY2003</u>																																													
(U) FY 2002 President's Budget:		0.000																																														
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(U) FY 2003 President's Budget:		1.685																																														
<u>Line Item No. & Name</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>To Complete</u>	<u>Total Cost</u>																																							
Not Applicable																																																
Related RDT&E: P.E. 0604759N, Major Test and Evaluation Investment																																																

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Exhibit R-2, RDTE Budget Item Justification
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CLASSIFICATION:

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FY 2003 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET

DATE: FEBRUARY 2002

BUDGET ACTIVITY: 6 PROGRAM ELEMENT: 0605865N
PROGRAM ELEMENT TITLE: Operational Test and
Evaluation Capability

(U) COST: (Dollars in Thousands)

PROJECT NUMBER & TITLE	FY 2001 ACTUAL	FY 2002 ESTIMATE	FY 2003 ESTIMATE	FY 2004 ESTIMATE	FY 2005 ESTIMATE	FY 2006 ESTIMATE	FY 2007 ESTIMATE	TO COMPLETE	TOTAL PROGRAM
R0831	OPTEVFOR SUPPORT								
	9,970	11,050	12,143	13,110	14,550	14,787	15,028	CONT.	CONT.
R2923	NAVY JT&E SUPPORT								
	-	496	499	499	499	500	499	CONT.	CONT.
Total	9,970	11,546	12,642	13,609	15,049	15,287	15,527	CONT.	CONT.

A. (U) MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: This program element provides Commander, Operational Test and Evaluation Force (COMOPTEVFOR) general support funding. This funding ensures COMOPTEVFOR's compliance with requirements established by Title 10 Law and directives from the Secretary of Defense and the Secretary of the Navy to carry out independent operational testing and evaluation. This funding is used for planning, conducting (including early operational tester involvement as part of acquisition reform), reporting of the results of operational tests and evaluations of weapon systems projects, and for tactics validation for the use of those systems. Funding is also provided for Navy support of the OSD-sponsored Joint Test and Evaluation (JT&E) program.

(U) JUSTIFICATION FOR BUDGET ACTIVITY: This program is funded under RDT&E MANAGEMENT SUPPORT because it supports the operations and installations required for general research and development use.

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Budget Item Justification
(Exhibit R-2, page 1 of 6)

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FY 2003 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET

DATE: FEBRUARY 2002

BUDGET ACTIVITY: 6 PROGRAM ELEMENT: 0605865N
PROGRAM ELEMENT TITLE: Operational Test and
Evaluation Capability

(U) PROGRAM CHANGE SUMMARY FOR TOTAL PE:

B. (U) PROGRAM CHANGE SUMMARY:

	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>
(U) FY 2002 President's Budget:	8,874	11,649	
- Execution Adjustment	+1,096		
- Major Program Adjustment			
- Section 8123 - Management Reform Initiative Reduction		-103	
(U) FY 2003 President's Budget:	9,970	11,546	12,642

(U) Schedule: Not applicable.

(U) Technical: Not applicable.

C. (U) OTHER PROGRAM FUNDING SUMMARY: Not applicable.

(U) RELATED RDT&E: Not applicable.

D. (U) SCHEDULE PROFILE: Not applicable.

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Budget Item Justification
(Exhibit R-2, page 2 of 6)

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FY 2003 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET

DATE: FEBRUARY 2002

BUDGET ACTIVITY: 6 PROGRAM ELEMENT: 0605865N
PROGRAM ELEMENT TITLE: Operational Test Force Support

(U) COST: (Dollars in Thousands)

PROJECT NUMBER & TITLE	FY 2001 ACTUAL	FY 2002 ESTIMATE	FY 2003 ESTIMATE	FY 2004 ESTIMATE	FY 2005 ESTIMATE	FY 2006 ESTIMATE	FY 2007 ESTIMATE	TO COMPLETE	TOTAL PROGRAM
R0831	Operational Test & Evaluation Force Support								
	9,970	11,050	12,143	13,110	14,550	14,787	15,028	CONT.	CONT.

A. (U) MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: This program element provides Commander, Operational Test and Evaluation Force (COMOPTEVFOR) general support funding. This funding ensures COMOPTEVFOR's compliance with requirements established by Title 10 Law and directives from the Secretary of Defense and the Secretary of the Navy to carry out independent operational testing and evaluation. This funding is used for planning, conducting (including early operational tester involvement as part of acquisition reform), and reporting of the results of operational tests and evaluations of weapon systems projects, and for tactics validation for the use of those systems.

(U) JUSTIFICATION FOR BUDGET ACTIVITY: This program is funded under RDT&E MANAGEMENT SUPPORT because it supports the operations and installations required for general research and development use.

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Budget Item Justification
(Exhibit R-2, page 3 of 6)

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FY 2003 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET

DATE: FEBRUARY 2002

BUDGET ACTIVITY: 6 PROGRAM ELEMENT: 0605865N PROJECT NUMBER: R0831
PROGRAM ELEMENT TITLE: Operational Test and PROJECT TITLE: Operational Test & Evaluation
Evaluation Capability Force Support

(U) PROGRAM ACCOMPLISHMENTS AND PLANS:

1. (U) FY 2001 ACCOMPLISHMENTS:
 - (U) (\$7,751) Operationally tested and evaluated CNO projects commensurate with authorized funding level.
 - (U) (\$2,219) Maintained level of effort associated with the DoD 5000-acquisition guidance, which required increased COMOPTEVFOR involvement in early operational assessments, developmental testing, advanced concept technology demonstrations, and advanced technology demonstrations.
2. (U) FY 2002 PLAN:
 - (U) (\$8,288) Operationally test and evaluate CNO projects commensurate with authorized funding level.
 - (U) (\$2,762) Maintain level of effort associated with the DoD 5000-acquisition guidance, which requires increased COMOPTEVFOR involvement in early operational assessments, developmental testing, advanced concept technology demonstrations, and advanced technology demonstrations.
3. (U) FY 2003 PLAN:
 - (U) (\$9,107) Operationally test and evaluate CNO projects commensurate with authorized funding level.
 - (U) (\$3,036) Maintain level of effort associated with the DoD 5000-acquisition guidance, which requires increased COMOPTEVFOR involvement in early operational assessments, developmental testing, advanced concept technology demonstrations, and advanced technology demonstrations.

B. (U) OTHER PROGRAM FUNDING SUMMARY: Not applicable.

C. (U) SCHEDULE PROFILE: Not applicable.

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Budget Item Justification
(Exhibit R-2, page 4 of 6)

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FY 2003 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET

DATE: FEBRUARY 2002

BUDGET ACTIVITY: 6 PROGRAM ELEMENT: 0605865N
PROGRAM ELEMENT TITLE: Operational Test
and Evaluation Support

(U) COST: (Dollars in Thousands)

PROJECT NUMBER & TITLE	FY 2001 ACTUAL	FY 2002 ESTIMATE	FY 2003 ESTIMATE	FY 2004 ESTIMATE	FY 2005 ESTIMATE	FY 2006 ESTIMATE	FY 2007 ESTIMATE	TO COMPLETE	TOTAL PROGRAM
R2923	Navy Joint Test and Evaluation Support								
	-	496	499	499	499	500	499	CONT.	CONT.

A. (U) MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: This program element provides funding for Navy support of the OSD-sponsored Joint Test and Evaluation (JT&E) program. This funding covers cost associated with facilities, personnel and administrative support for T&E-focused Navy-led Joint Feasibility Studies and Joint Tests to ensure Navy compliance with requirements established by directive from the Secretary of Defense to carry out the JT&E program. The funding is used for planning, conducting, and reporting of the results of T&E-focused JT&E projects to assess the interoperability of systems in joint operations and explore potential solutions to identified problems, to evaluate and provide recommendations on improvements in joint technical and operational concepts, to evaluate and validate testing methodologies having multi-service application, to assess technical or operational performance of interrelated and/or interacting systems under realistic joint operational conditions, and to provide data from joint field tests and exercises with which to validate models, simulations, and test beds. This funding is essential for Navy participation with the other services in this critical joint arena.

(U) JUSTIFICATION FOR BUDGET ACTIVITY: This program is funded under RDT&E MANAGEMENT SUPPORT because it supports the operations and installations required for general research and development use.

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Budget Item Justification
(Exhibit R-2, page 5 of 6)

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FY 2003 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET

DATE: FEBRUARY 2002

BUDGET ACTIVITY: 6 PROGRAM ELEMENT: 0605865N
PROGRAM ELEMENT TITLE: Operational Test
and Evaluation Support

(U) PROGRAM ACCOMPLISHMENTS AND PLANS:

1. (U) FY 2001 ACCOMPLISHMENTS: Not applicable
2. (U) FY 2002 PLAN: (\$496) Support Joint Test & Evaluation (JT&E) projects as directed by the JT&E Senior Advisory Council.
3. (U) FY 2003 PLAN: (\$496) Support JT&E projects as directed by the JT&E Senior Advisory Council.

B. (U) OTHER PROGRAM FUNDING SUMMARY: Not applicable.

C. (U) SCHEDULE PROFILE: Not applicable.

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Budget Item Justification
(Exhibit R-2, page 6 of 6)

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EXHIBIT R-2, FY 2003 RDT&E,N Budget Item Justification

DATE: FEBRUARY 2002

BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605866N

PROGRAM ELEMENT TITLE: Navy Space and Electronic Warfare (SEW) Support

(U) COST: (Dollars in Thousands)

PROJECT NUMBER TITLE	FY 2001 ACTUAL	FY 2002 ESTIMATE	FY 2003 ESTIMATE	FY 2004 ESTIMATE	FY 2005 ESTIMATE	FY 2006 ESTIMATE	FY 2007 ESTIMATE	TO COMPLETE	TOTAL PROGRAM
R0739 Navy C4I Top Level Requirements	1,529	1,541	1,549	1,725	1,708	1,740	1,774	CONT.	CONT.
X0706 EMI Reduction and Radio Frequency Management	1,586	1,844	1,693	1,880	1,923	1,962	2,007	CONT.	CONT.
Total	3,115	3,385	3,242	3,605	3,631	3,702	3,781	CONT.	CONT.

A. (U) MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

Project R0739 Navy C4I Top Level Requirements - Analyzes fleet requirements and research and development technology to develop top level plans for operating Navy Communications, Command and Control Computers, and Intelligence (C4I) and space systems in the Space and Electronic Warfare (SEW) mission area.

Project X0706 Electromagnetic Interference (EMI) Reduction and Radio Frequency (RF) Management - Develops advanced technology to identify and reduce EMI sources from Navy systems and platforms.

(U) JUSTIFICATION FOR BUDGET ACTIVITY: This program is funded under RDT&E MANAGEMENT SUPPORT because it supports the operations and installations required for general research and development use.

B. (U) PROGRAM CHANGE FOR TOTAL P.E.: See Individual Projects.

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EXHIBIT R-2a, FY 2003 RDT&E,N Budget Item Justification

DATE: FEBRUARY 2002

BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605866N

PROJECT NUMBER: R0739

PROGRAM ELEMENT TITLE: SEW Support

PROJECT TITLE: Navy C4I Top Level Requirements

(U) COST: (Dollars in thousands)

PROJECT NUMBER & TITLE	FY 2001 ACTUAL	FY 2002 ESTIMATE	FY 2003 ESTIMATE	FY 2004 ESTIMATE	FY 2005 ESTIMATE	FY 2006 ESTIMATE	FY 2007 ESTIMATE	TO COMPLETE	TOTAL PROGRAM
R0739	Navy Command, Control, Communications, Computers and Intelligence (C4I) Top Level Requirements								
	1,529	1,541	1,549	1,725	1,708	1,740	1,774	CONT.	CONT.

A. (U) MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: This project provides analysis of fleet requirements and research and development technology to develop top level plans for operating Navy Communications, Command, Control, Communication and Computer Integration (C⁴I) and space systems in the Space and Electronic Warfare mission area.

(U) PROGRAM ACCOMPLISHMENTS AND PLANS:

1. (U) FY 2001 ACCOMPLISHMENTS:

- (U) (\$532) Investigated potential benefit of and leveraging capability from continual reduction in chip development prices for DoN.
- (U) (\$474) Supported architectural analysis for web-based interaction DON-wide, including considerations to ensure maintenance of appropriate security. Product would be a comprehensive architecture displaying this security, the interfaces, and the functions.
- (U) (\$523) Identified requirements to improve Graphic User Interfaces by using tools to enhance intuitive understanding (i.e., icons and pull down menus) while providing all required capabilities for DON missions/administrative functions.

2. (U) FY 2002 PLAN:

- (U) (\$1,541) Identify requirements, programs and actions which can contribute to the development of Navy Space and Electronic Warfare issues and conduct analyses or solutions to problems for current and future scientific projects.

3. (U) FY 2003 PLAN:

- (U) (\$1,549) Identify requirements, programs and actions which contribute to the development of Navy Space and Electronic Warfare issues. Conduct analyses or solutions to problems for current and future scientific projects.

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Exhibit R-2a, RDT&E Project Justification
(Exhibit R-2a, page 2 of 6)

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EXHIBIT R-2a, FY 2003 RDT&E,N Budget Item Justification

DATE: FEBRUARY 2002

BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605866N

PROJECT NUMBER: R0739

PROGRAM ELEMENT TITLE: SEW Support

PROJECT TITLE: Navy C4I Top Level Requirements

B. (U) PROGRAM CHANGE SUMMARY:

	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>
(U) FY 2002 President's Budget:	1,543	1,573	
(U) Adjustments from PRESBUDG:			
(U) Section 8086 - .7% Pro-Rata	-11		
(U) Government Wide Rescission	-3		
(U) SBIR Adjustment	-29		
(U) Execution Adjustment	+29		
(U) Section 8123 - Management Reform Initiative Reduction		-14	
(U) FFRDC Reduction		-18	
(U) FY 2003 President's Budget Submission:	1,529	1,541	1,549

(U) Schedule: Not applicable.

(U) Technical: Not applicable.

C. (U) OTHER PROGRAM FUNDING SUMMARY: Not applicable.

(U) RELATED RDT&E: Not applicable.

D. (U) SCHEDULE PROFILE: Not applicable.

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Exhibit R-2a, RDT&E Project Justification
(Exhibit R-2a, page 3 of 6)

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EXHIBIT R-2a, FY 2003 RDT&E,N Budget Item Justification

DATE: FEBRUARY 2002

BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605866N

PROJECT NUMBER: X0706

PROGRAM ELEMENT TITLE: SEW Support

PROJECT TITLE: EMI Reduction and Radio
Frequency Management

(U) COST: (Dollars in Thousands)

PROJECT

NUMBER	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	TO	TOTAL
TITLE	ACTUAL	ESTIMATE	ESTIMATE	ESTIMATE	ESTIMATE	ESTIMATE	ESTIMATE	COMPLETE	PROGRAM
X0706 EMI Reduction and Radio Frequency Management	1,586	1,844	1,693	1,880	1,923	1,962	2,007	CONT.	CONT.

A. (U) MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: Electromagnetic Interference (EMI) Reduction and Radio Frequency (RF) Management. This project develops tools to identify and reduce EMI sources from Navy systems and platforms. There are several tools under development to identify and reduce EMI through proper use of the electromagnetic spectrum. Automated capabilities will be developed that reflect research into new operational fleet battle group frequency management processes that reflect current fleet needs for a communications planning and frequency management tool used to plan communication links and analyze, allocate, and assign communication and radar frequencies for fleet operations. Research also includes EMI models for phased arrays, development of new analysis techniques to avoid EMI, and development of guidance to harmonize commercial EMI practices.

(U) PROGRAM ACCOMPLISHMENTS AND PLANS:

1. (U) FY 2001 ACCOMPLISHMENTS:

- (U) (\$876) CPM and EMCAP: Developed interfaces for real time use of spectrum into communications and other C4ISR equipment based on the Navy operational EME to find available spectrum automatically to reduce incidences of interference to and from systems.
- (U) (\$432) EMI Models: Development of generic C4ISR system models. Concentrated development on user utility to run on as many computer platforms and networks as feasible.
- (U) (\$278) Criteria and Test Procedures: Continued to investigate industrial standards (foreign and domestic) for conversion to military standards. Continued to incorporate new communications planning techniques, including phased array antennas.

2. (U) FY 2002 PLAN:

R-1 Line Item 165

Exhibit R-2a, RDT&E Project Justification
(Exhibit R-2a, page 4 of 6)

UNCLASSIFIED

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EXHIBIT R-2a, FY 2003 RDT&E,N Budget Item Justification

DATE: FEBRUARY 2002

BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605866N

PROJECT NUMBER: X0706

PROGRAM ELEMENT TITLE: SEW Support

PROJECT TITLE: EMI Reduction and Radio
Frequency Management

- (U) (\$1,019) CPM and EMCAP: Develop web based applications that tie into not only Navy C4ISR systems but into commercial communication systems being used by the Navy and ensure their operational use is not a source or victim of interference to find available spectrum automatically.
- (U) (\$502) C4I EMC: Due to congested topside environment, develop enhancements to antennas to reduce incidences of interference, and in addition develop models to analyze those enhancements to be repeatable on other platform types.
- (U) (\$323) C4I EMC Criteria : Incorporate commercial systems practices and standards into EMC C4I criteria. Continue to incorporate new communications and radar planning techniques, including phased array antennas.

3. (U) FY 2003 PLAN:

- (U) (\$935) Automated Tools: Develop interfaces for EMCAP, CPM, and other automated tools to interface with evolving network protocols to ensure currency for web based applications. Develop new algorithms for automated tools for new Navy C4ISR systems for both government and commercial communication systems being used by the Navy to ensure their operational use is not a source or victim of interference to find available spectrum automatically.
- (U) (\$461) C4I EMC: Due to congested topside environment, develop enhancements to antennas to reduce incidences of interference, develop models to analyze those enhancements, and research the interference for below decks emitters such as wireless LANs to the topside and below decks environments.
- (U) (\$297) C4I EMC Criteria : Incorporate commercial systems practices and standards into EMC C4I criteria and incorporate into Navy practices.

B. (U) PROGRAM CHANGE SUMMARY:

FY 2001: \$-12K: Section 8086 .7% Pro Rata Reduction. \$-4K: Government Wide Recission PL 106-554, Sec. 1403.
\$-38K: SBIR Assessment. \$-79K: Navy Miscellaneous Adjustment.
FY 2002: \$-16K: Section 8123 Management Reform Initiative.

C. (U) OTHER PROGRAM FUNDING SUMMARY:

(U) PE 0702827N, AGSAG 4B7N	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY2006	FY2007
	3,103	2,573	2,894	3,036	3,081	3,142	3,213
	R-1 Line Item 165						

Exhibit R-2a, RDT&E Project Justification
(Exhibit R-2a, page 5 of 6)

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EXHIBIT R-2a, FY 2003 RDT&E,N Budget Item Justification

DATE: FEBRUARY 2002

BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605866N

PROJECT NUMBER: X0706

PROGRAM ELEMENT TITLE: SEW Support

PROJECT TITLE: EMI Reduction and Radio
Frequency Management

(U) Related RDT&E: Not applicable.

D. (U) ACQUISITION STRATEGY: Not applicable.

E. (U) SCHEDULE PROFILE: Not applicable.

R-1 Line Item 165

Exhibit R-2a, RDT&E Project Justification
(Exhibit R-2a, page 6 of 6)

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification									Date: February 2002	
APPROPRIATION/BUDGET ACTIVITY RDT&E,N/6					R-1 ITEM NOMENCLATURE 0605867N Link Crimson		Space and Electronic Warfare Surveillance/ Reconnaissance Support			
COST (\$ in Millions)	FY 00	FY 01	FY 02	FY 03	FY 04	FY 05	FY 06	FY 07	Cost to Complete	Total Cost
Total PE Cost	10.961	11.577	16.347	12.120	12.460	12.924	13.992	14.274	CONT	CONT
Link Crimson/Z1034	9.759	11.339	12.327	12.120	12.460	12.924	13.992	14.274	CONT	CONT
Link Crimson/29096	0	0	.991	0	0	0	0	0	CONT	CONT
Link Crimson/29097	0	0	2.775	0	0	0	0	0	CONT	CONT
Space Management Support/R2007	1.202	.238	.254	0	0	0	0	0	CONT	CONT
A. (U) MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: Established to exploit all National and Selected Service sensor systems to improve tactical support to fleet operational commanders. Project also supports fleet exercises, which provide the venue for testing modifications to existing programs and being made aware of new requirements. Additional detailed information is available at a higher level of classification.										
(U) Z1034: Established to exploit all National and Service sensor systems to improve tactical support to fleet operational commanders. Project also supports fleet exercises, which provide the venue for testing modifications to existing programs and being made aware of new requirements.										
(U) PROGRAM ACCOMPLISHMENTS AND PLANS:										
1. (U) FY 2001 ACCOMPLISHMENTS:										
<ul style="list-style-type: none">(U) (\$.250) Joint Exercises/Training(U) (\$2.388) Support to TBMD(U) (\$1.946) Support to Littoral/Expeditionary Warfare(U) (\$4.031) Precision Strike/Mission Planning(U) (\$2.724) Improved Data Dissemination/Exploitation										
2. (U) FY 2002 PLAN:										
<ul style="list-style-type: none">(U) (\$0.350) Joint Exercises/Training(U) (\$0.900) Support to TBMD(U) (\$2.900) Support to Littoral/Expeditionary Warfare(U) (\$4.720) Precision Strike/Mission Planning(U) (\$3.126) Improved Data Dissemination/Exploitation(U) (\$2.672) Sensor Awareness/Mission Planning(U) (\$1.425) Assured Communication/Navigation										

3. (U) FY 2003 PLAN:

- (U) (\$0.425) Joint Exercises/Training
- (U) (\$0.670) Support to TBMD
- (U) (\$2.563) Support to Littoral/Expeditionary Warfare
- (U) (\$2.786) Precision Strike/Mission Planning
- (U) (\$2.326) Improved Data Dissemination/Exploitation
- (U) (\$1.725) Sensor Awareness/Mission Planning
- (U) (\$1.625) Assured Communication/Navigation

B. Program Change Summary:

FY01: No Change

FY02: +\$1,000K Congressional Add for Time Critical Strike; +\$2,800K Congressional Add for Demo of Radiant Argon on F/A-18; -\$144K Section 8123 Management Reform Initiative.

(U) R2007: The project provides resources to the Naval Space Command (NAVSPACECOM) for the conduct of its support testing.

A. (U) MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: This project provides resources to the Naval Space Command (NAVSPACECOM) for the conduct of its support testing. NAVSPACECOM is tasked with providing space support to fleet units worldwide, while also planning and coordinating future support system analysis, requirements, architectural and feasibility studies, technical demonstrations and prototype system development for concepts to provide space support to the fleet warfighter.

(U) PROGRAM ACCOMPLISHMENTS AND PLANS:

1. (U) FY 2001 PLAN:

- (U) (\$.234) Integrate Joint Tactical Ground Station (JTAGS) into Global Command & Control System product delivery. Study transition issues for Multi Mission Mobile Processor (SBIR) implementation
- (U) (\$.004) Portion of extramural program reserved for Small Business Innovation Research assessment in accordance with 15 USC 638.

2. (U) FY 2002 PLAN:

- (U) (\$.254) Study transition issues for Multi Mission Mobile Processor (SBIR) implementation

Exhibit R-2, RDT&E Budget Item Justification		Date: February 2002
B. PROGRAM CHANGE SUMMARY:		
<p>FY01: -\$2K Section 8086 Reduction; -\$1K Government Wide Rescission; -\$4K SBIR Reduction; -\$5K Other Navy adjustments.</p> <p>FY02: -\$2K Section 8123 Management Reform Initiative.</p>		
(U) JUSTIFICATION FOR BUDGET ACTIVITY: This program is funded under Budget Activity 6 because it supports the operations and installations required for general research and development use.		
C. Other Program Funding Summary: DERF Funding for FY2002 (\$4.0M)		

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CLASSIFICATION:

EXHIBIT R-2, RDT&E Budget Item Justification						DATE: February 2002			
APPROPRIATION/BUDGET ACTIVITY RDT&E, N /BA-6 Management Support			PROGRAM ELEMENT (PE) NAME AND NO. 0605873M Marine Corps Program Wide Support						
COST (\$ in Millions)	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	Cost to Complete	Total Program
Total PE Cost	21.153	20.133	12.208	12.917	13.867	13.418	13.690	Cont	Cont
C0030 Marine Corps Studies and Analyses	6.399	5.131	6.318	6.505	6.679	6.897	7.041	Cont	Cont
C0033 Marine Corps Operational Testing & Evaluation Activity	4.234	2.485	2.447	2.863	2.806	2.854	2.908	Cont	Cont
C2330 Chemical Biological Consequence Management	10.520	11.555	0.933	0.981	1.760	0.999	1.019	Cont	Cont
C2930 Phase 0 Activities	0.000	0.962	2.510	2.568	2.622	2.668	2.722	Cont	Cont
Quantity of RDT&E Articles									
(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:									
This program element (PE) provides the analytical foundation for the Marine Corps Studies System (MCSS), including mandated Mission Area Analyses and Cost and Operational Effectiveness Analyses. The MCSS is the front end of the Marine Corps' acquisition system, supporting the Concepts Based Requirements Systems and Combat Development Process. In addition, the PE supports Marine Corps Operational Test and Evaluation (OT&E) Activities.									
This program is funded under RDT&E MANAGEMENT SUPPORT because it supports the oprations and installation required for general research and development use.									

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CLASSIFICATION:

EXHIBIT R-2, RDT&E Budget Item Justification		DATE:
		February 2002
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT (PE) NAME AND NO.	
RDT&E, N /BA-6 Management Support	0605873M Marine Corps Program Wide Support	
B. PROGRAM CHANGE SUMMARY		
	FY2001	FY2002
(U) FY 2002 President's Budget:	17.727	9.614
(U) Adjustments from the President's Budget:		
(U) SBIR/STTR Transfer	-0.245	
(U) Execution Adjustment		
(U) Minor Affordability Adjustment		-0.181
(U) Program Adjustment	3.671	10.700
(U) FY 2003 NAVCOMPT Budget:	21.153	20.133
		12.208
CHANGE SUMMARY EXPLANATION:		
(U) Funding: See Above.		
(U) Schedule: Not Applicable.		
(U) Technical: Not Applicable.		

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification						DATE: February 2002			
APPROPRIATION/BUDGET ACTIVITY RDT&E, N /BA-6 Management Support	PROGRAM ELEMENT NUMBER AND NAME 0605873M Marine Corps Program Wide Support			PROJECT NUMBER AND NAME C0030 Marine Corps Studies and Analyses					
COST (\$ in Millions)	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	Cost to Complete	Total Program
Project Cost	6.399	5.131	6.318	6.505	6.679	6.897	7.041	Cont	Cont
RDT&E Articles Qty									

(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

This project funds the general studies and analysis portion of the Marine Corps Studies System (MCSS) and provides the analytical foundation for the Marine Corps Studies System (MCSS). The project funds a variety of studies and analyses approved for execution in the annual Marine Corps Studies Master Plan (MCSMP) including mandated Mission Area Analyses (MAAs), Milestone I (Conceptual) Analysis of Alternatives (AoAs), technology assessments, force structure analysis, weapons systems analysis, concept development and analysis, cost benefit analysis, training assessments, feasibility analysis, scenario development, and other analyses in support of the Program Objective Memorandum (POM) initiatives. The MCSS also supports the front end of the Marine Corps' acquisition system, which supports the Expeditionary Force Development System (EFDS) and the Combat Development Process (CDP). The MAA process provides quantitative and qualitative information to decision makers for basing decisions effecting improvements in operational concepts, doctrine, force structure, education, training, and procurement. The MCSS also provides analytical support to decision makers for the resolution of current problems and issues identified by the operating forces.

The Marine Corps Studies System makes use of the Marine Corps Research University to conduct studies and analysis projects in the areas of basic and applied research and Advanced Technology Development. In FY 01, this project holds funds for Phase 0 activities, which are designed to better-define emerging initiatives and "jump start" high priority programs and initiatives in Phase 0 of the Acquisition Process. In FY02 and beyond, Phase 0 activities will be moved to project C2930. In FY01, the Joint Requirements Oversight Council (JROC) approved the Joint Family of Interoperable Operational Pictures (FIOP) and assigned Marine Corps Combat Development Command (MCCDC) as lead for PHASE III of the plan. The USMC is to develop a strategy to make Services Systems more interoperable per the requirements developed in Phase II of FIOP.

PROGRAM ACCOMPLISHMENTS AND PLANS

(U) FY 2001 Accomplishments

- (U) \$ 1.087 Initiated and completed the Mission Area Analyses (MAA) Sea Lines of Communication-2, Northeast Asia Sustained Operations Ashore (NEA SOA), Peace Keeping, and Marine Expeditionary Brigade (MEB) Sustained Operations Ashore (MEB SOA).
- (U) \$ 0.781 Commenced two FY2001 AoAs: Multi Role Radar System and Short Range Anti Armor Weapon.
- (U) \$ 0.721 Continued and completed FY 2000 study and analysis projects: Aviation Ordnance Requirements Adequacy and Combat Service Support Studies.
- (U) \$ 1.219 Commenced the Chemical Biological First Responder, RF Propagation, Quality of Life in the Marine Corps, Electro Optical Maintenance and Inventory studies approved in the FY01 Marine Corps Studies Master Plan.
- (U) \$ 0.968 Commenced Sigint Assessment Upgrade and Force Protection Studies with the Marine Corps Research University.
- (U) \$ 0.676 Provided support for Family of Interoperable Program (FIOP) issues for MCCDC Command Element Advocacy (CEA) engagement.
- (U) \$ 0.947 Provided for the conduct of high priority Milestone 0/Phase 0 activities for several emerging acquisition requirements.
- (U) Total \$ 6.399

(U) FY 2002 Planned Program

- (U) \$ 1.332 Initiate and complete four individual Mission Area Analyses studies: Military Operations in Urban Terrain, Marine Expeditionary Force (MEF) Forcible Entry, Humanitarian Assistance, and Marine Expeditionary Brigade (MEB) Forcible Entry analyses.
- (U) \$ 0.649 Continue and complete FY 2001 AoAs and initiate new AoAs. Estimate one of the new AoAs will be completed in this fiscal year.
- (U) \$ 2.164 Complete ongoing FY01 study and analysis projects. Commence Horn of Africa, Deployability Readiness, Determining the Impact of NDAA DEPTempo Rules, Expeditionary Fires, Utility of a High Speed Vessel (HSV) for USMC Operations, Aviation Logistics Support Aboard MPF(F) shipping, Alternative Organizations for Ground Combat, Alternatives for Improving Critical Secondary MOS Utilization, Imagery Analysis Support to Precision Targeting studies; approved in the FY02 Marine Corps Studies Master Plan (MCSMP).

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2002																																																
APPROPRIATION/BUDGET ACTIVITY RDT&E, N /BA-6 Management Support	PROGRAM ELEMENT NUMBER AND NAME 0605873M Marine Corps Program Wide Support	PROJECT NUMBER AND NAME C0030 Marine Corps Studies and Analyses																																																
<ul style="list-style-type: none"> • (U) \$ 0.986 Start and complete two to three new studies with the Marine Corps Research University. <p>(U) Total \$ 5.131</p> <p>(U) FY 2003 Planned Program:</p> <ul style="list-style-type: none"> • (U) \$ 1.267 Initiate and complete three to four Mission Area Analyses (MAAs). Specific MAAs will be identified during the MAA review in the previous FY. • (U) \$ 0.885 Complete FY 2002 AoAs and initiate new AoA support. • (U) \$ 0.890 Continue and complete previous year's study and analysis projects. • (U) \$ 2.309 Commence the high priority study and analysis projects approved in the FY 2003 MCSMP. • (U) \$ 1.003 Start two to three new studies at the Marine Corps Research University. <p>(U) Total \$ 6.318</p>																																																		
<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; width: 30%;">(U) PROJECT CHANGE SUMMARY</th> <th style="text-align: right; width: 10%;">FY2001</th> <th style="text-align: right; width: 10%;">FY2002</th> <th style="text-align: right; width: 10%;">FY2003</th> </tr> </thead> <tbody> <tr> <td>(U) FY 2002 President's Budget:</td> <td style="text-align: right;">5.779</td> <td style="text-align: right;">5.177</td> <td></td> </tr> <tr> <td colspan="4">(U) Adjustments from the President's Budget:</td> </tr> <tr> <td> (U) SBIR/STTR Transfer</td> <td style="text-align: right;">-0.025</td> <td></td> <td></td> </tr> <tr> <td> (U) Execution Adjustment</td> <td></td> <td></td> <td></td> </tr> <tr> <td> (U) Minor Affordability Adjustment</td> <td></td> <td style="text-align: right;">-0.046</td> <td></td> </tr> <tr> <td> (U) Program Adjustment</td> <td style="text-align: right;">0.645</td> <td></td> <td></td> </tr> <tr> <td>(U) FY 2003 President's Budget:</td> <td style="text-align: right;">6.399</td> <td style="text-align: right;">5.131</td> <td style="text-align: right;">6.318</td> </tr> <tr> <td colspan="4">(U) CHANGE SUMMARY EXPLANATION:</td> </tr> <tr> <td colspan="4">(U) Funding: See Above.</td> </tr> <tr> <td colspan="4">(U) Schedule: Not Applicable.</td> </tr> <tr> <td colspan="4">(U) Technical: Not Applicable.</td> </tr> </tbody> </table>			(U) PROJECT CHANGE SUMMARY	FY2001	FY2002	FY2003	(U) FY 2002 President's Budget:	5.779	5.177		(U) Adjustments from the President's Budget:				(U) SBIR/STTR Transfer	-0.025			(U) Execution Adjustment				(U) Minor Affordability Adjustment		-0.046		(U) Program Adjustment	0.645			(U) FY 2003 President's Budget:	6.399	5.131	6.318	(U) CHANGE SUMMARY EXPLANATION:				(U) Funding: See Above.				(U) Schedule: Not Applicable.				(U) Technical: Not Applicable.			
(U) PROJECT CHANGE SUMMARY	FY2001	FY2002	FY2003																																															
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(U) Technical: Not Applicable.																																																		
<p>(U) B. OTHER PROGRAM FUNDING SUMMARY: Not Applicable.</p>																																																		
<p>(U) Related RDT&E: PE 0605154N (Center for Naval Analyses (CNA), Project C0031 (Marine Corps Operations Analysis Group)</p>																																																		
<p>(U) C. ACQUISITION STRATEGY: The Marine Corps Study System utilizes several contract types and vehicles to provide independent and objective analysis needed for the study system. Government labs, fixed firm price contract delivery orders, competitive bidding and combination of one or more studies into one requirement are typical strategies used on a routine basis to nurture the allocated resources. Use of Indefinite Quantity contracts also provide particularly effective economies, especially when utilized with firm, fixed price task orders. Best interest strategies are also employed when available IDIQ contracts may not be appropriate. Overall, this combination of contractual and business approaches serves to maximize the results obtained from limited resources.</p>																																																		
<p>(U) D. SCHEDULE PROFILE: Not Applicable</p>																																																		

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EXHIBIT R-2a, RDT&E Project Justification						DATE: February 2002			
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME			PROJECT NUMBER AND NAME					
RDT&E, N /BA-6 Management Support	0605873M Marine Corps Program Wide Support			C0033 Marine Corps Operational Testing & Evaluation Activity					
COST (\$ in Millions)	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	Cost to Complete	Total Program
Project Cost	4.234	2.485	2.447	2.863	2.806	2.854	2.908	Cont	Cont
RDT&E Articles Qty									

(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

The Marine Corps Operational Test and Evaluation Activity (MCOTEA) supports the material acquisition process by managing the USMC Operational Test (OT) programs for the Acquisition Category (ACAT) I through ACAT IV less OT of manned aircraft and to perform such other functions as may be directed by the Commandant of the USMC. The primary purpose of Operational Test and Evaluation (OT&E) is to provide information to the Milestone Decision Authority (MDA) regarding the Operational Effectiveness (OE) and Operational Suitability (OS) of the system addressed at decision point. MCOTEA must ensure that the Marine in the Operating Forces receive the very best possible equipment and support. MCOTEA must ensure each system proposed for acquisition is tested adequately, evaluated objectively and reported independently.

PROGRAM ACCOMPLISHMENTS AND PLANS

(U) FY 2001 Accomplishments

- (U) \$ 1.071 MCOTEA: Provided organizational support and utilities.
- (U) \$ 0.930 MCOTEA: Provided organizational salaries.
- (U) \$ 2.233 MCOTEA: Funding provided direct support of Operational Testing for systems in the Acquisition pipeline

(U) Total \$ 4.234

(U) FY 2002 Planned Program

- (U) \$ 0.805 MCOTEA: Provide for organizational support and utilities.
- (U) \$ 1.329 MCOTEA: Provide for organizational salaries.
- (U) \$ 0.351 MCOTEA: Provide organizational support, utilities, and salaries for the New Automation Information Systems (AIS) test branch.

(U) Total \$ 2.485

(U) FY 2003 Planned Program

- (U) \$ 0.678 MCOTEA: Provide for organizational support and utilities.
- (U) \$ 1.400 MCOTEA: Provide for organizational salaries.
- (U) \$ 0.369 MCOTEA: Provide organizational support, utilities, and salaries for the New Automation Information Systems (AIS) test branch.

(U) Total \$ 2.447

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification						DATE: February 2002			
APPROPRIATION/BUDGET ACTIVITY		PROGRAM ELEMENT NUMBER AND NAME			PROJECT NUMBER AND NAME				
RDT&E, N /BA-6 Management Support		0605873M Marine Corps Program Wide Support			C0033 Marine Corps Operational Testing & Evaluation Activity				
(U) Project Change Summary		FY2001	FY2002	FY2003					
(U) FY 2002 President's Budget:		2.001	2.508						
(U) Adjustments from the President's Budget:									
(U) SBIR/STTR Transfer		-0.011							
(U) Execution Adjustment									
(U) Minor Affordability Adjustment			-0.023						
(U) Program Adjustment		2.244							
(U) FY 2003 President's Budget:		4.234	2.485	2.447					
CHANGE SUMMARY EXPLANATION:									
(U) Funding: See Above.									
(U) Schedule: Not Applicable.									
(U) Technical: Not Applicable.									
(U) B. OTHER PROGRAM FUNDING SUMMARY:									
Line Item No. & Name	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	To Compl	Total Cost
(U) Not Applicable.									
(U) Related RDT&E: Not Applicable.									
(U) C. ACQUISITION STRATEGY: * An explanation of acquisition, management, and contracting strategies shall be provided for each project. Not Applicable for the OT&E portion of the acquisition phase.									
(U) D. SCHEDULE PROFILE: Not Applicable.									

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification						DATE: February 2002			
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME			PROJECT NUMBER AND NAME					
RDT&E, N /BA-6 Management Support	0605873M Marine Corps Program Wide Support			C2330 Chemical Biological Consequence Management					
COST (\$ in Millions)	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	Cost to Complete	Total Program
Project Cost	10.520	11.555	0.933	0.981	1.760	0.999	1.019	Cont	Cont
RDT&E Articles Qty									

(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

This project includes improvements in all areas of the Chemical Biological Incident Response Force inclusive to its commodity areas of reconnaissance, decontamination, emergency medical support, communications and general support and force protection.

PROGRAM ACCOMPLISHMENTS AND PLANS

FY 2001 Accomplishments:

- (U) \$ 0.173 CBCM: Completed research and development of an improved communications device to receive, manipulate and transmit data.
 - (U) \$ 0.226 CBCM: Completed development of the Nuclear Biological Chemical (NBC) Simulated Training Kits.
 - (U) \$ 0.214 CBCM: Completed improvement of the Field Rugged Gas Chromometer/Mass Spectrometer GC/MS.
 - (U) \$ 0.200 CBCM: Completed research and development of the Level A Pass-Thru for the Self-Contained Breathing Apparatus.
 - (U) \$ 0.212 CBCM: Completed research, development and testing of the Electro-Chemical Decontamination Solution.
 - (U) \$ 0.091 CBCM: Completed research and development of General Purpose Filters that are compatible with the standard M40 Canister to provide improved Toxic Industrial Chemicals (TIC) protection.
 - (U) \$ 0.535 NANO TECH: Researched implications of Nano Technology dry decontamination process.
 - (U) \$ 1.200 EDS: Researched applications of electro-static mass decontamination process for biological and chemical warfare agent decontamination.
 - (U) \$ 1.943 CWAN: Researched the feasibility of development of a Chemical Warning Agent Network.
 - (U) \$ 5.726 CMIS: Continued research and development of Consequence Management Information System (CMIS).
- (U) Total \$ 10.520

FY 2002 Planned Program:

- (U) \$ 0.490 CBIRF: Began research and development of a device that senses victims through debris of a collapsed building or through standing structures, such as wall and doors.
- (U) \$ 0.080 CBIRF: Continued research and development of a hand-held broad spectrum detector capable of real-time detection and identification of chemical warfare agents (CWA), Toxic Industrial Chemicals/Materials (TIC/TIM) below the Immediately Dangerous to Life and Health (IDLH) level.
- (U) \$ 0.088 CBIRF: Completed live agent testing of the HAPSITE upgrade to validate its level of TIC/TIM detection and identification.
- (U) \$ 0.750 CBIRF: Began research and development of a lightweight cooling system capable of cooling personnel wearing various levels of chem-bio protective equipment.
- (U) \$ 0.265 CBIRF: Began research and development of a device that will identify isotopes of radiological hazards to help characterize an incident and determine the duration of a hazard.
- (U) \$ 0.760 CBIRF: Continue research and development of environmentally benign, patient-safe chem-bio decontaminant.

UNCLASSIFIED

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE:
		February 2002
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N /BA-6 Management Support	0605873M Marine Corps Program Wide Support	C2330 Chemical Biological Consequence Management
<ul style="list-style-type: none"> • (U) \$ 0.300 CBIRF: Continued research and development of a hand-held detector capable of real-time collection detection and identification of biological warfare agents (BWA) below the infective dosage level. • (U) \$ 0.240 CBIRF: Began research and development of a structural triage technology capable of detecting hidden structural damage and identifying structural hazards. • (U) \$ 0.949 CBCM: Began research and development of improved respiratory protection, improved level "A" ensembles, improved hand protection and an improved drinking system. • (U) \$ 0.200 NANOTECH RESPONSES: Continued research of nanoparticle technology, specifically begin evaluation and development of protocols for neutralization of chem-bio agents. • (U) \$ 0.791 NANOTECH RESPONSES: Continued research of nanoparticle technology, specifically begin evaluation and determine efficacy with regard to remediation of contaminated rooms and buildings. • (U) \$ 1.687 CBMA: Continued research and development of an analyzer for chem-bio agents, toxic industrial chemicals/materials (TIC/TIM) and toxins. • (U) \$ 4.955 CMIS: Continued research and development of the Consequence Management Interoperability System (CMIS), including fielding a "Fast Track" capability in response to the Sept 11th requirements. 		
(U) Total \$	11.555	
(U) FY 2003 Planned Program:		
<ul style="list-style-type: none"> • (U) \$ 0.302 CBCM: Continue to research and development of a hand-held detector capable of real-time collection, detection, and identification of biological warfare agents (BWA) below the infective dosage level. • (U) \$ 0.490 CBCM: Continue research and development of a device that senses victims through debris of a collapsed building or through standing structures, such as wall and doors. • (U) \$ 0.100 CBCM: Continue research and development of a hand-held, field-rugged, broad spectrum detector capable of real-time detection and identification of chemical warfare agents (CWA), toxic industrial chemicals/materials (TICs), and toxic industrial materials (TIMs) below the immediately dangerous to life or health (IDHA). • (U) \$ 0.041 CBCM: Begin research and development of a patient tracking and following system. 		
(U) Total \$	0.933	
	FY2001	FY2002
(U) FY 2002 President's Budget:	9.947	0.958
(U) Adjustments from the President's Budget:		
(U) SBIR/STTR Transfer	-0.209	
(U) Execution Adjustment		
(U) Minor Affordability Adjustment 0.782		-0.103
(U) Program Adjustment	0.782	10.700
(U) FY 2003 President's Budget:	10.520	11.555
		0.933

UNCLASSIFIED

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2002
APPROPRIATION/BUDGET ACTIVITY RDT&E, N /BA-6 Management Support	PROGRAM ELEMENT NUMBER AND NAME 0605873M Marine Corps Program Wide Support	PROJECT NUMBER AND NAME C2330 Chemical Biological Consequence Management

CHANGE SUMMARY EXPLANATION:
 (U) Funding: See Above.
 (U) Schedule: Not Applicable.
 (U) Technical: Not Applicable.

(U) B. OTHER PROGRAM FUNDING SUMMARY:

Line Item No. & Name	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007 To Compl	Total Cost
(U) PMC Line (BLI# 652200) Field Medical**	1.492	6.567	0.961	4.213	5.334	0.000	0.000	Continuing

** CBIRF, CBIRF MEU Kits & Small Unit Bio Detection are Procurement Programs contained within the PMC Field Medical Equipment funding line that are associated with Chemical Biological Consequence Management.

(U) Related RDT&E: Not Applicable.

(U) C. ACQUISITION STRATEGY: * CBIRF follows a modified Non-Developmental (NDI)/Commercial-Off-The-Shelf (COTS) Abbreviated Acquisition Program (AAP) Strategy. CBIRF research and development (R&D) efforts focus primarily on the assessment of the applicability of a COTS item to the CBIRF mission and operational environment. In addition, CBIRF R&D funds resource third party live agent testing of COTS equipment needed to validate its effectiveness in meeting CBIRF requirements. To be effective, the CBIRF R&D efforts must include a very active continuous market research element to beware of cutting edge technology and the shorter "technology" cycle to prevent CBIRF equipment from becoming obsolete. All three efforts are inter-related and directly lead to procurement decisions and expenditures on NDI/COTS equipment.

(U) D. SCHEDULE PROFILE: Not Applicable.

UNCLASSIFIED

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification						DATE: February 2002			
APPROPRIATION/BUDGET ACTIVITY RDT&E, N /BA-6 Management Support		PROGRAM ELEMENT NUMBER AND NAME 0605873M Marine Corps Program Wide Support				PROJECT NUMBER AND NAME C2930 Phase 0 Activities			
COST (\$ in Millions)	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	Cost to Complete	Total Program
Project Cost	0.000	0.962	2.510	2.568	2.622	2.668	2.722	Cont	Cont
RDT&E Articles Qty									

(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

Phase 0 Activities consist of a series of interrelated activities in Phase 0 of the acquisition process designed to investigate potential material solutions to validate needs, estimate program costs, support sound business decisions, correct inherent disconnects between the Programming Planning, Budgeting System (PPBS) cycle, the Combat Development and Acquisition Management Systems, and prevent undue delays in pursuing priority requirements. The process supports Commanding General (CG), Marine Corps Combat Development Command (MCCDC) and Commander, Marine Corps Systems Command (COMMARCORSSYSCOM) by providing funding to priority programs, thus allowing for the examination of concepts and alternatives to support an orderly transition from requirements to initiatives and initiatives to funded programs. This will permit the Program Objective Memorandum (POM) process to focus on activities of evaluating, prioritizing and integrating rather than defining and resolving raw, immature requirements. Phase 0 activities literally "jump start" high priority programs of the acquisition process. Furthermore, since 70% of a program's life cycle cost is determined during Phase 0, this initiative will put resources to work where the return on investment (payoff) is the greatest. Typical studies conducted with Phase 0 activities include but are not limited to Market Surveys, Business Case Analysis (BCA), Cost as an Independent Variable (CAIV) analysis, Life Cycle Cost Estimates, Cost Comparison Analysis, Acquisition Strategies, Trade-off Analysis in lieu of an Analysis of Alternatives. Also a recent initiative to have MARCORSSYSCOM develop a BCA to help MCCDC frame the requirement in terms of a COTs solution will place increased demands on the funds in FY01 and beyond. In FY01, Phase 0 Activities were funded under C0030, Marine Corps Studies and Analysis, Program Element 0605873M, Marine Corps Program Wide Support.

PROGRAM ACCOMPLISHMENTS AND PLANS

(U) FY 2001 Accomplishments: Funded in C0030, Marine Corps Studies and Analysis

FY 2002 Planned Program

- (U) \$ 0.962 Provided for the conduct of high priority Milestone 0/Phase 0 activities for 2 to 3 Market Surveys and associated Business Case Analysis; 3 to 4 Life Cycle Cost estimates, CAIV Analysis of Cost Comparison Analysis; 1 to 2 Trade-off Analyses in lieu of Analysis of Alternatives; and to develop 1 to 2 Acquisition Strategies.

(U) Total \$ 0.962

FY 2003 Planned Program

- (U) \$ 2.510 Provides for the conduct of high priority Milestone 0/Phase 0 Activities for 10 to 11 emerging requirements. Funds 7 to 8 Business Case Analyses/Market Surveys and associated Acquisition Strategies, 6 to 7 Life Cycle Cost Estimates or cost analyses and 2 other analyses such as Tailored Executive Analysis.

(U) Total \$ 2.510

UNCLASSIFIED

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification						DATE:			
						February 2002			
APPROPRIATION/BUDGET ACTIVITY		PROGRAM ELEMENT NUMBER AND NAME			PROJECT NUMBER AND NAME				
RDT&E, N /BA-6 Management Support		0605873M Marine Corps Program Wide Support			C2930 Phase 0 Activities				
(U) PROJECT CHANGE SUMMARY:		FY2001	FY2002	FY2003					
(U) FY 2002 President's Budget:		0.000	0.971						
(U) Adjustments from the President's Budget:									
(U) SBIR/STTR Transfer									
(U) Execution Adjustment									
(U) Minor Affordability Adjustment			-0.009						
(U) Program Adjustment									
(U) FY 2003 President's Budget:		0.000	0.962	2.510					
CHANGE SUMMARY EXPLANATION:									
(U) Funding: See Above.									
(U) Schedule: Not Applicable.									
(U) Technical: Not Applicable.									
(U) B. OTHER PROGRAM FUNDING SUMMARY:									
<u>Line Item No. & Name</u>		FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007 To Compl	Total Cost
(U) Not Applicable									
(U) Related RDT&E: Not Applicable.									
(U) C. ACQUISITION STRATEGY: A variety of acquisition management and contracting strategies are employed. Support contractors and government laboratories are normally used to execute individual tasks. In one situation, a government laboratory may be the preferred organization to execute the task, while others may be more suited to a support contractor. The approach is tailored to the specific issue being addressed and the analytical requirements of that system/situation.									
(U) D. SCHEDULE PROFILE: Not Applicable.									